ARMY LOGISTICIAN

Supply Support Activities in Iraq

Unit Deactivation Logistics

Is It Time to Reconsider Training for PBUSE?

Graduate-Level Education for Logisticians

Report Documentation Page

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PROFESSIONAL BULLETIN OF UNITED STATES ARMY LOGISTICS

Cover: In the modular Army, where logisticians often have to support many customers over a wide area, the supply support activity (SSA) is the crucial nexus between supplies flowing into the theater and support provided to the warfighter. The challenges faced by two SSAs in Operation Iraqi Freedom are discussed in articles beginning on pages **12** and **22**. The cover photo typifies the demanding nature of work at an SSA, as the SSA movement control noncommissioned officer in charge of the 210th Brigade Support Battalion, 2d Brigade Combat Team (BCT), 10th Mountain Division (Light Infantry), inventories tires at the SSA yard at Camp Striker, Iraq. *(Photo by SFC Angela McKinzie, 2d BCT, 10th Mountain Division, PAO.)*

Sustainment Center of Excellence Lifelong Learning Portal: Gateway to Lifelong Learning for Logisticians

BY MAJOR GENERAL MITCHELL H. STEVENSON

As the Army continues to transform to a leaner, more deployable, and more lethal formation with state-of-the-art equipment for sustaining well-trained Soldiers, Army training is also moving forward with a new look. To help transform how we train, the Army Combined Arms Support Command (CASCOM) has been moving forward with a concept called "lifelong learning."

We have accomplished a great deal in support of the tenets of lifelong learning—not just advancing the concept for combat service support (CSS) Soldiers and leaders, but also advancing it for the Army. Lifelong learning is no longer just an idea; it is an established concept at the Army Training and Doctrine Command and the Department of the Army.

In support of the lifelong learning concept, we have established the "Sustainment Center of Excellence Lifelong Learning Portal" (SCOE–LLP). The SCOE–LLP, in partnership with the virtual muscle of the SCOE Sustainment Knowledge Network (SKN) (which is available on line at https://www.us.army.mil/suite/page/372426), is the hub supporting lifelong learning and collaboration for the CASCOM, Ordnance, Quartermaster, Transportation, and Army Logistics Management College learning domains. The Applied Technology Division, under the CASCOM Deputy Commander for Training, Training Support Directorate, is the staff coordinating and operational organization for the SCOE–LLP.

The SKN, which is designed to facilitate lifelong learning and knowledge management by bringing commanders, Soldiers, and support staff the information they need, further supports the generation, application, management, and exploitation of CSS and Army knowledge to foster collaboration among CSS Soldiers and units. SKN personnel facilitate online forums and help the CSS community apply knowledge management to share expertise and experience, develop intuitive leaders, improve decisionmaking, and develop organizations and terms.

The SCOE–LLP uses a learning content management system to deploy learning content to users. It can deploy interactive multimedia instruction (IMI), simulations, games, and other instructional materials such as course management plans, lesson plans, and plans of instruction.

It also has a help desk, forums, and other student assistance capabilities. The SCOE–LLP is a "virtual" blend of connectivity and people that provides lifelong-learning materials, information, and support with a 24 hours a day, 7 days a week reachback capability.

The SCOE–LLP enables the branch, unit, commander, or instructor to track a student's progress by "virtual" means. The student management function can track which courses—even which modules of courses—have been taken. If a course's content is updated, the SCOE–LLP can notify the Soldier. In this way, the SCOE–LLP is not only a collection of training and educational materials but also a means of standardizing the instruction that Active and Reserve component students receive. The SCOE–LLP ensures that all Soldiers receive the same instruction in a standardized format and that individual Soldiers can refresh their skills whenever they require, no matter where in the world they are.

Using the SCOE–LLP offers many advantages. For example, using SCOE–LLP—

• Blends classroom instructional modes to help increase practical exercise (hands-on) time.

• Increases instructor control and student contact time beyond the traditional classroom.

• Bridges the sustainment training gap between, for example, advanced individual training, basic and advanced noncommissioned officer courses, and warrant officer courses.

• Makes updates to course materials instantly available to mobile training teams, instructors, and learners.

To date, more than 5,000 Soldiers and civilians have actively enrolled in about 200 SCOE–LLP courses. I invite you to check your proponent learning domain via the SCOE–LLP website at http://www.cascom.lee.army.mil/scoe/scoebbportal/. And if you don't like what you see, write to us and tell us how we can better serve you.

For more information or to request assistance, please send an email to the SCOE–LLP at leeeSCOEBLACKBOARD@lee.army.mil.

MAJOR GENERAL MITCHELL H. STEVENSON IS THE COMMANDING GENERAL OF THE ARMY COMBINED ARMS SUPPORT COMMAND AND FORT LEE, VIRGINIA, AND THE CHAIRMAN OF THE ARMY LOGISTICIAN BOARD OF DIRECTORS.

Unit Deactivation Logistics in Review

BY MAJOR VINCENT C. NWAFOR

A bustle of activity at units undergoing transformation permeated the air in Europe. Quite a few units had already transformed, yet, my search for information on the unit deactivation process yielded little.

My unit, the 130th Engineer Brigade, V Corps, received transformation orders to relocate its colors and heraldry items from Germany to its new home with U.S. Army Pacific in Hawaii. The brigade's 37-year tenure in Germany was ended immediately following its second combat tour in Iraq. These orders fueled my need for information on the "quasi-deactivation" process. I call it "quasi-deactivation" because the brigade's personnel were reassigned in just 6 months based on the Army's needs, but all of the unit's equipment stayed behind in Europe.

The deactivation was made possible by proactive planning and trial and error in the execution process. The brigade and its supporting agencies learned along the way and ultimately accomplished the deactivation and relocation tasks with style. This article provides insights from the 130th Engineer Brigade's perspective on unit deactivation logistics and recommends actions to improve the process.

Plan for Success

Planning for a successful deactivation entails assembling a competent logistics team to execute deactivation tasks effectively. Accurate property accountability must precede property disposition. Seeking external support early to overcome the impacts of a dwindling unit personnel strength and time constraints must be on the things-to-do list, and establishing logistics milestones to gauge the progress of the deactivation process is extremely helpful. Lieutenant Colonel Elizabeth Halford, the 130th Engineer Brigade's deputy commander, once said, "Proactive planning means beating the deadline and not just meeting the deadline."

A Soldier from the brigade S–4 office looks at the tons of engineer training aids at the local training area that must be turned in before the unit deactivates.

The first step is to assemble a team of noncommissioned officers and officers from the brigade S–4 office and unit supply rooms who are competent in anticipatory logistics; they also must have the proven coordination skills that are critical in negotiating the red tape that is specific to the unit deactivation and relocation processes. The S–4 staff should provide depth, breadth, and reach in logistics support. They should also be creative, mission-focused, and not easily shaken or deterred; these are skills that will be tested time after time. Progress may stall as the brigade undertakes seldom-exercised logistics deactivation events, and supporting agencies may not be as motivated as the S–4 staff to act quickly when problems arise. Settling for a weak S–4 shop equates to accepting the risk of failure. Fortunately, the 130th Engineer Brigade's command team set the tone for its overall success.

Next, conduct a 100-percent inventory and maintain 100-percent accuracy of property on hand and on the books. Make adjustments as required by Army Regulation 735–5, Policies and Procedures for Property Accountability. Be very aggressive with the financial liability investigations of property loss process because the accelerated loss of unit personnel during deactivation and relocation will quickly deplete the witness pool. Be sure to find out who is responsible for lost property before the brigade's personnel are reassigned. Consider identifying all contracted equipment up front and arrange for contract termination and equipment pickup.

To monitor progress on a weekly basis, develop internal brigade milestones. The improved Commander's Checklist for Restructure/Rebasing is an invaluable aid in developing deactivation logistics milestones. The Hessen Garrison Community unit deactivation status slides, which accompany the checklist, suggest pertinent but easily overlooked deactivation tasks. The slides provide an opportunity to think ahead, ask the right questions, and deliver responsive deactivation logistics when it counts. The checklist is available on the U.S. Army Europe (USAREUR) website at http://g3operations. hqusareur.army.mil/NewChecklist/startup/default.htm.

Turning In Property

Other than reassigning personnel, the main focus for a deactivating unit is property disposition. Units are required to deliver the equipment at –10/20 standards (fully mission capable) to gaining units or turn it in to the supply system. Considering a unit's organic capabilities and the high volume of equipment involved, disposing of property in a short period of time is a difficult task. Inspecting thousands of items, ordering and receiving repair parts, and fixing items to standard are time consuming. The 130th Engineer Brigade alleviated this challenge by vigorously making its case to higher headquarters, and it eventually secured an exception to the policy so that it could turn in or laterally transfer equipment "as is." Had the brigade not been able to turn in the equipment "as is," the traditional lateral transfer process would have put the brigade behind its deactivation timeline.

Dedicated external support is required to negotiate relocation and deactivation smoothly because a unit's typical organic support system is insufficient for the deactivation tasks. USAREUR's 21st Theater Sustainment Command came to the 130th Engineer Brigade's rescue with a novel concept: the Harvest Team. The Harvest Team consisted of personnel specializing in property book management; communications equipment; vehicle maintenance; nuclear, biological, and chemical equipment; and transportation. With the help of brigade personnel, the Harvest Team divided equipment into piles for lateral transfer and piles for turn-in to the supply system.

The Harvest Team also assisted with lateral-transfer executions and facilitated coordination with movement control teams for delivering equipment to gaining units. Sending 21st Theater Sustainment Command personnel with the equipment delivery party smoothed operations and quelled any reluctance from gaining units to accept the equipment "as is."

Prioritizing

Having parts left in the supply pipeline can delay the closing of unit Standard Army Retail Supply System accounts. Turning in rolling stock early will free up maintenance personnel to assist supply personnel in the effort to clear repair parts from the supply pipeline. Before turning in rolling stock, coordinate with the local transportation motor pool and movement control team to ensure they can support local transportation requirements.

Another task to tackle early is the turn-in of central issue facility (CIF) items for Soldiers leaving for permanent changes of station. Clear their CIF accounts as soon as possible. Disposition of heraldry equipment needs approval from the Center of Military History, and the sooner these turn-in actions are initiated the better. Use contracted packers to ship unit heraldry items, and do not forget to have customs officials present during the packing.

About 6 weeks before the deactivation date, the unit should conduct its deactivation and colors-casing ceremony—before all its members ride off into the sunset. Clear training aids from home station training areas, walk the grounds with representatives from the installation directorate of public works and the Defense reutilization and marketing office, and develop the clearing plan.

Personnel Considerations

Carefully factor into your decisions the mass exodus of personnel that will reduce the unit strength to 35 percent by 60 days before the deactivation date. The unit personnel roster from the 180-day mark to the deactivation date was one of the parameters used to prove the 130th Engineer Brigade's need to turn in equipment "as is." Personnel turnover can be complicated by retirements, leaves, chapter actions, and school attendance. A robust personnel roster can be deceiving in a headquarters company where a majority of the personnel are senior officers and noncommissioned officers.

Even if senior members of the unit are not directly involved in equipment turn-in, their departures will still affect the unit's deactivation. The 130th Engineer Brigade's key personnel losses included the command sergeant major, the headquarters and headquarters company commander and first sergeant, several noncommissioned officers-in-charge, and a few primary staff officers. The manpower drain on the unit, along with the uncertainty of the personnel reassignment process, elevates a deactivating unit's stress level. In the 130th Engineer Brigade's case, an amiable command climate and strong second-tier leadership saved the day.

Recommended Improvements

Some improvements to the "quasi-deactivation" logistics enterprise could help deactivating units in the future. For example, the deactivation base orders should

be more detailed to reduce red tape and provide access to available transformation information. Deactivation base orders need to address vital information, such as the Commander's Checklist for Restructure/Rebasing. The exact date when the deactivating unit should be off the red-cycle tasking line-of-sight must be specified so that deactivating units do not constantly have to submit reclamas for taskings to their higher headquarters. The base orders should also address any changes to the normal equipment transfer and turn-in processes. Gaining units should accept equipment from deactivating units in serviceable "as is" condition.

Make it a priority to support deactivating units with selected services—Harvest Team is a prime example. The base order's coordinating instructions should direct supporting units to find out what the supported units need so that they can genuinely employ the good customer service approach. Some supporting agencies lean toward being bureaucratic sticklers, hiding behind regulations that do not necessarily cover situations like a "quasi-deactivation," and units may be left trying to figure out alternative solutions to fit their needs. Besides putting a strain on the unit, personnel at the brigade level may not be familiar with USAREUR and Army regulations, which are important to understand when developing alternative solutions.

If you go by the book while trying to get funds for refreshments for the unit deactivation and colors-casing ceremony, you will discover that, while appropriated funds can pay for the expense of conducting the actual ceremony, they may not be used for pre- or postdeactivation refreshments without an exception to policy from the Office of the Secretary of the Army (Army Regulation 37–47, Representation Funds of the Secretary of the Army, paragraphs 2–3c and 2–10). I suggest that the Army reform the cumbersome process of

This chart is one of the Hessen Garrison Community unit deactivation status slides, which help guide a unit through the deactivation process.

Unit Deactivation Status

Effective Date: XX	Today: Effective Date – XX

Personnel Orders: 65 People present for duty; 6 still on unit personnel accountability report until they reach next duty station.							
⬤ Initially Assigned	Currently Assigned	Without PERDROPS	Expiration of term of service, retirement, chapter actions	Need assignment instructions	Have assignment instructions/Need orders	Completed permanent change of station	% Complete

Passports required	Passports for service members or family members	Passports requested	% Complete	Visas required	Visas on hand	Visas requested	% Complete

Household Goods Shipment:				Exceptional Family Member Program:	
Required	Scheduled	Picked Up	% Complete	Soldiers with exceptional family members who require actions	
				Soldiers with family members who must be screened	

	Open Cases	Pending Cases	Disposition
Army Substance Abuse Program			

Property--Key Date:	On Hand	Turned In	% Turned In	Facilities:	On Hand	Turned In	% Turned In
Organizational property				Administrative Buildings			
Installation property				Barracks			
Organizational clothing/ individual equipment				Family Quarters			
Nontactical vehicles				Leased Quarters			
Privately owned vehicle shipment				Rental Quarters			
Privately owned vehicle disposal				Capitalized Fuel Points			
Historical items				Motor Parks			
Phones				Dining Facility			

Comments:

RED – Less Than 60 %	AMBER – 61 to 89 %	GREEN – 90 to 100 %

PERDROPS: 1st Personnel Command's Transformation Personnel Distribution System

Movers haul a Word War II M16 half-track personnel carrier from the 130th Engineer Brigade building at Pioneer Kaserne, Hanau, to the Army Historical Depot in Germersheim, Germany.

obtaining such a small amount of money for an official military function.

Unit deactivation tasks are like postcombat reconstruction tasks that are rarely talked about until it is necessary. The time has come to include these unique essential tasks in a mission training plan (MTP). We live in a fast-changing world, and our military must continue to transform to remain relevant. USAREUR has developed a very useful checklist that can be used as a starting point for establishing a deactivation mission essential task list. Unit deactivation tasks ought to be on a formal military record, such as an MTP, for easy reference and certification purposes.

Although many Army organizations maintain excellent unit products for accomplishing a variety of tasks, access to those products is often limited to their own personnel. Great products generated in organizations are not optimized and shared with counterparts across the Army. As a result, units waste time reinventing the wheel like I did, trying to pinpoint information on unit deactivation processes when other units had already been through the process.

An Army-wide "Unit Special Products" website should be created and tied to Army Knowledge Online. It should be accessible only with a common access card to mitigate security concerns. A link to the "Unit Special Products" site should be a standard fixture in units' websites. For the venture to be useful and successful, a file-naming convention and specifications for quality files should be established and custodians of the files (from company to major command level)

should be appointed. Quarterly submission of quality products, such as critical deactivation documents, military ceremony scripts, mission analysis documents, milestone charts, standing operating procedures, policy letters, training calendars, and briefing slides, should be required. The repository of these products should be categorized by command and staff functions to facilitate research.

Deactivation is a known phenomenon in the current process of Army transformation, but scant information is available to tackle the logistics missions that are part of that process. Deactivation base orders should sufficiently detail subordinates' specific tasks to a degree that defines processes and addresses the implications of accelerated personnel loss and red-cycle taskings. When dealing with equipment disposition, the deactivating unit's internal support system is likely to be insufficient given the high rate of personnel attrition, equipment volume, and time constraints. The deactivation logistics process should be improved so that Soldiers can take apart the unit in a proactive fashion. **ALOG**

Major Vincent C. Nwafor is the support operations officer for the 391st Combat Sustainment Support Battalion. He was previously assigned as the brigade S–4 of the 130th Engineer Brigade in Hanau, Germany. He is a graduate of the Army Command and General Staff College and the Army Logistics Executive Development Course.

Bomb Squads and EOD Personnel:
Interoperability for Homeland Defense

BY COLONEL DICK A. LARRY

The Army has long trained civilian law enforcement bomb squads, but a Navy-run school trains military explosive ordnance disposal personnel. This division of labor must be bridged so civilian and military personnel are ready to work as joint teams.

Since 1971, Army personnel have trained the technicians of civilian public safety bomb squads (PSBSs) at the Hazardous Devices School (HDS) at Redstone Arsenal, Alabama. HDS, which is operated by the Army Ordnance Munitions and Electronic Maintenance School, offers training in render-safe and disposal procedures for improvised explosive devices (IEDs) and other hazardous materials to selected law enforcement and public safety officers. HDS is actually a joint Army and Federal Bureau of Investigation (FBI) enterprise. Army personnel conduct the training, and the FBI reimburses the Army for those personnel, funds HDS courses, and has administrative control over student selections.

However, over the years a division has developed between PSBS personnel and the Department of Defense's (DOD's) explosive ordnance disposal (EOD) personnel. This division has increased as more police departments have improved the capabilities of their bomb squads, which has reduced their reliance on DOD personnel for EOD support. During the 1980s and 1990s, as PSBS use grew and DOD EOD support to state and local governments waned, both sides began to see less and less of each other, especially in training and interagency operations, so the divide grew larger.

A primary reason for this division is that military and civilian bomb technicians have different certification procedures. During the 1990s, the newly formed National Bomb Squad Commanders Advisory Board ratified certification requirements for civilian bomb technicians and accreditation standards for civilian bomb squads. The FBI certifies PSBS personnel through HDS. This FBI certification has become the primary mechanism for ensuring that civilian personnel are trained to HDS standards. These standards are derived from military EOD operations lessons learned and tactics, techniques, and procedures (TTP). However, DOD EOD personnel are not certified through

HDS but through graduation from the Naval School Explosive Ordnance Disposal (NAVSCOLEOD) at Eglin Air Force Base, Florida.

Many PSBS personnel believe that, while DOD EOD personnel know quite a bit about military ordnance, they know less about IEDs than PSBS personnel. This is a faulty assumption, but it has persisted for many years. It exists, at least in part, because neither side totally understands the training provided by their respective schools, HDS and NAVSCOLEOD.

The gap between PSBS and DOD EOD training needs to be bridged. The security needs of the Nation require military and civilian bomb technicians who can work together. I believe the way to achieve this capability is by establishing a PSBS-DOD EOD interoperability course.

Growing Need for Interoperability

Over the last 20 to 30 years, DOD EOD personnel have provided military assistance to civil authorities on numerous occasions to remove abandoned ordnance items and IEDs. Hurricane Katrina operations demonstrated that DOD also plays a significant role in managing the consequences of natural and manmade disasters. DOD Directive 5525.5, DOD Cooperation with Civilian Law Enforcement Officials; DOD Directive 3025.12, Military Assistance for Civil Disturbances; the Stafford Disaster Relief and Emergency Assistance Act (42 U.S. Code 5121); and Executive Orders 12690 and 12804 all provide for the use of U.S. troops within the borders of the United States. DOD support and assistance to civil authorities is a fact of life in our post 9/11 world.

At the same time that DOD involvement in civil affairs is expanding, DOD's EOD expertise is growing, largely because of the demands of current combat operations. DOD EOD personnel have encountered large numbers and different types of IEDs in Operations Enduring Freedom and Iraqi Freedom, and they undoubtedly are the best at what they do. However, their lessons learned and TTP, while known and discussed by their PSBS brethren, are not being fully exploited. Much of DOD's expertise resides in the 20th Support Command (Chemical, Biological, Radiological, Nuclear, and High Yield Explosives [CBRNE]) at Aberdeen Proving Ground, Maryland. This command—a component of the Army Forces Command—was designated to form the Joint Task Force for Weapons of Mass Destruction (WMD) Elimination in 2006 and now owns all Army EOD and technical escort assets in the continental United States and provides that support to all combatant commanders worldwide, including the U.S. Northern Command. While instructors at HDS have incorporated much of what the Army has learned in Iraq and Afghanistan into their training, it is not the same as having DOD EOD personnel working side by side with their PSBS counterparts.

The 9/11 Commission Report cited "a lack of coordination among First Responder Agencies." I submit that suicide bombers and conventional and CBRNE IEDs will increase and eventually will come to U.S. soil. As a country at war, the United States must use all of its assets to combat these threats. DOD has a mission to provide support to civil authorities. IEDs do not recognize city or state lines, and an IED capable of killing could be found in any town in the country. Assuming that such an attack will occur only in New York City or Los Angeles is shortsighted.

As a result of the threat, DOD EOD personnel provide support to many communities that do not have PSBSs. However, DOD EOD and PSBS integration and sustainment training is lacking. No formal or informal training facility, curriculum, or TTP exist for interagency PSBS and DOD EOD operations and support. No one in the country is providing this training, even though world events dictate the need.

The existing training for bomb technicians is insufficient to support the more than 400 PSBS personnel and the more than 4,000 Army, Marine Corps, Navy, and Air Force EOD personnel nationwide. Local DOD EOD assets are not being fully employed to support local PSBSs during responses to unusual, terrorist, and CBRNE devices. DOD's range of capabilities and assets is not being used fully during domestic crisis response preparations and operations.

Current Training Program

PSBS personnel attend the 6-week Hazardous Devices Basic Course at HDS. All students must be hazardous materials qualified to attend. In week 1, they receive instruction on the personal protective equipment bomb suit, SRS–5 flak jacket and helmet, WMD and WMD dispersal devices, downrange considerations in incident management, basic direct-current electricity, mechanical-action fuzing, electrical-action fuzing, bomb threat searches, conventional explosives, improvised explosives, and military ordnance.

During the second week, 3 days are devoted to demolition training and to storage and transport of explosives, 1 day to post-blast investigations and domestic bombings, and 1 day to x-ray equipment. Week 3 features 2 days of practical exercises in x-ray

and disrupter training, a 1-day practical exercise in rigging using hook-and-line equipment, a 1-day practical exercise using water bottles, hydra-jets, and disrupter shots, and 1 day devoted to shape charges, Tupperware bowl shots, and Bootbangers.

In week 4, 1 day focuses on hand entry, 1 day on logic tree and situation analysis, and render-safe procedures, and 3 days on a practical exercise of responding to IEDs with tools and equipment. Week 5 includes 2 days of evaluation on IED response with tools and equipment, 2 days for a round-robin practical exercise on booby traps, methamphetamine labs, and WMD devices, and 1 day of introduction to robotics. Week 6 then concentrates on robotics.

Graduates return after 3 years for recertification. The Hazardous Devices Recertification Course lasts 5 days. The first day consists of practical testing in explosives use and construction of electronic firing systems. The next 3 days include practical exercises on responding to typical IEDs found in the United States, a suicide bomber event, and a chemical WMD event. The last day features a written exam and a briefing on threats, new equipment, and trends.

In fiscal years 2006 and 2007, PSBS personnel from 20 high-threat cities received 2 weeks of training on electronic countermeasures procedures and equipment. This training should increase in fiscal year 2008.

Proposed Training Program

I believe that a pilot training course for DOD EOD and PSBS technicians should be established to teach common skills and techniques and provide interoperability in support of homeland defense. Such a PSBS–DOD EOD interoperability course would—

• Increase nationwide response interoperability at minimal cost while using assets currently in place.

• Improve multi-agency response by sharing common training.

• Improve multi-agency cooperation.

The proposed training course should be 10 days in length. The first week, Phase 1, would train DOD EOD personnel on TTP taught in the 6-week PSBS basic course. This could include electronic countermeasures and robotics.

The second week, Phase II, would recertify PSBS personnel and qualify DOD EOD personnel on joint interoperability procedures and response in support of homeland defense, homeland security, and military assistance to civil authorities (in accordance with National Bomb Squad Commanders Advisory Board standards). The first week (Phase I) would bring DOD EOD personnel up to speed on PSBS TTP and curriculum. The second week (Phase II) would bring PSBS and DOD EOD personnel together for combined operations.

Each student would operate as a team leader 3 times and observe 12 total incidents during the course of training. I believe we could conduct 35 classes and produce a total of 288 DOD and 528 PSBS graduates. Students would be certified through DOD or PSBS, but each would be qualified and trained for joint response in support of homeland defense.

Advantages of the Concept

Since PSBS and DOD EOD personnel currently have no formal training in joint interoperability, response, or TTP, any such training that occurs depends on the initiative of individual organizations and people. While this informal training is helpful, it is not adequate to provide a cohesive, combined joint approach by both PSBSs and DOD for dealing with the potential threat to the homeland.

Hurricane Katrina highlighted that DOD can and will assist local and state governments in responding to natural disasters. According to the DOD Strategy for Homeland Defense and Civil Support, released in June 2005, DOD should participate in homeland defense efforts in order to—

Improve national and international capabilities for homeland defense and homeland security: The broad range of threats posed by terrorists and other transnational actors has expanded our traditional concept of national security. . . . State, local, and tribal authorities, the private sector, and our allies and friends abroad are also critical contributors to US national security.

Members of the 20th Support Command (Chemical, Biological, Radiological, Nuclear, and High Yield Explosives) package recovered warfare materials in a Department of Transportation-approved chemical overpack container called a "multiple round container" for transport to a storage area or demilitarization site.
(Photo courtesy of the 20th Support Command)

A Remotec ANDROS robot is prepared to conduct reconnaissance by a Marine EOD team during Operation Eastern Shield in Greenville, North Carolina. The operation was a joint-service training exercise that simulated a weapons of mass destruction event and a multiagency response over several days. To counter the threat posed by weapons of mass destruction, the author believes that such joint EOD training should be expanded beyond the military to include civilian bomb squads.
(Photo by Corporal James P. McLaughlin, USMC)

In such an environment, DOD must unify its efforts with those of its key interagency partners and international friends and allies to ensure the nation's security. The Department will promote the integration and sharing of applicable DOD capabilities, equipment, and technologies with Federal, state, local, and tribal authorities and the private sector. Sharing technology, capabilities, and expertise strengthens the nation's ability to respond to hostile threats and domestic emergencies. Likewise, cooperative homeland defense education and training initiatives will help partners build capacity for homeland defense and will foster a common understanding of shared threats and how best to address them. In turn, DOD can readily leverage the expertise of other Federal, state, local, and tribal authorities and international partners to improve its own capabilities for counterterrorism, maritime interception, and other missions critical to an active, layered defense.

As set forth in the National Defense Strategy of 2005, DOD is transforming its approach to homeland defense just as it transforms national defense capabilities overall. Guiding homeland defense planning is the concept of an active, layered defense, predicated on seizing the initiative from our adversaries.

As cited in the DOD Strategy for Homeland Defense and Civil Support, DOD not only wants to share expertise within DOD but also to leverage expertise within other Federal, state, local, and tribal authorities to ensure that, as a country, we have the best, most active,

layered defense possible. Just as we have mutual response by DOD fire departments to assist local fire departments, a similar mechanism is needed for CBRNE events that will require both PSBS and DOD EOD expertise within the United States. DOD fire departments train and exercise these capabilities, but PSBSs and DOD EOD personnel do not.

Our PSBSs have some of the finest bomb technicians in the world. DOD EOD personnel similarly are superb, having encountered more IEDs than any other bomb technicians in the world, including those in Israel. Following the terrorist attacks of 11 September 2001, we can no longer allow the knowledge and expertise of PSBSs and DOD EOD to be stovepiped.

In Iraq and Afghanistan, FBI and Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) personnel are working side by side with DOD EOD personnel in the Combined Explosive Exploitation Cell in the fight against IEDs. This cell has proven to be an excellent means of developing interoperability and exchanging information in the Global War on Terrorism. There is no reason why this same cooperative attitude should not be adopted for homeland defense.

The use of electronic countermeasures and lessons learned in both Iraq and Afghanistan are being injected into the curriculum of HDS. However, we should go a step further: PSBS and DOD EOD personnel should train and operate in joint teams to further enhance the unity of effort of our explosive ordnance first responders. I believe the program outlined in this article will provide that opportunity.   **ALOG**

Colonel Dick A. Larry is chief of the IED Defeat Division, Army Asymmetric Warfare Office, Office of the Deputy Chief of Staff, G–3/5/7, Department of the Army. He is a graduate of the Marine Corps Command and Staff College, the Army Command and General Staff College, and the Naval War College. He holds a B.S. degree in public administration from Northern Arizona University and a master's degree in national security and strategic studies from the Naval War College.

Collecting Information From the Field

by Earl C. Driver

In a complex organization like the Army Combined Arms Support Command (CASCOM) at Fort Lee, Virginia, leaders and decisionmakers must routinely ask at least three critical, overarching questions in order to maintain the relevance of their products, their focus on their customers, and the viability of their organization: Where are we, where are we going, and how do we get there? These questions must be answered so that the products and services the organization generates serve its intended primary customer.

CASCOM's principal customers are sustainment Soldiers and the transforming organizations to which those Soldiers are assigned. Determining "what right looks like" in the areas of doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) for a transforming Army presents combat, training, and doctrine developers and associated training institutions with significant challenges. This is particularly true when one considers the rapidly changing nature of the operational environments in which our sustainment Soldiers serve around the world and the impact of the Army's ongoing transformation. Additional challenges are created by the complex, cumbersome nature of the joint and Army requirements processes themselves; a change in one DOTMLPF area often affects change in others.

Change of this magnitude and pace cannot be addressed effectively from the desks of the doctrine, combat, and training developers at CASCOM, nor by the course managers assigned to the schools responsible for training our sustainment Soldiers. However, resource constraints seldom permit the combat, training, and doctrine developers to travel to the sustainment Soldiers' places of duty to determine if the products and services being developed for the Soldiers actually meet their needs.

To facilitate and sustain the relevance of the products and services generated on behalf of sustainment Soldiers and organizations, CASCOM is continuing to upgrade its process for communicating with the field by applying cost-effective approaches to collecting feedback. These approaches use resources within the Analysis and Integration (A&I) Division of CASCOM's Directorate of Lessons Learned/Quality Assurance (DL2/QA).

Collecting Feedback

The A&I Division comprises three discrete branches: Lessons Learned Integration, Combat Training Centers, and External Evaluations. Together, they provide a unique capability for routinely collecting feedback from sustainment Soldiers and organizations engaged in military operations around the world.

The mission focus of the Lessons Learned Integration Branch is rapid collection and integration of observations, insights, and lessons (OIL) derived from contemporary operational environments. This is accomplished primarily through activities such as collection and analysis teams sponsored by the Center for Army Lessons Learned at Fort Leavenworth, Kansas, and reverse-collection and analysis teams (R–CAATs) sponsored by CASCOM. Under the R–CAAT program, sustainment commanders and staff who have recently redeployed are brought to CASCOM to share OIL based on their recent operational experiences.

The Combat Training Centers Branch mission focus is to harvest OIL from observer/controllers at the Army's combat training centers (CTCs). This is accomplished in one of two ways: by sending CASCOM doctrine, training, and combat developers who have specific data collection needs to one of the CTCs to participate in right-seat-rides, or by bringing the observer/controllers back to CASCOM for a reverse right-seat-ride, which allows CASCOM staff to meet with the observer/controllers and collect data pertaining to specific collection needs.

The External Evaluations Branch collects field feedback by conducting studies, surveys, and interviews. This branch consists of four teams: Ordnance, Quartermaster, Transportation, and Army Logistics Management College (ALMC). Each team has a direct-support relationship with its assigned school as well as an overarching support relationship with the CASCOM commanding general and his supporting staff. Each team has a quality assurance (training) mission focus area mandated by the Army Training and Doctrine Command (TRADOC) and a special mission focus area of supporting the CASCOM commanding general and his staff and the functional proponents and their staffs at the Ordnance, Quartermaster, and Transportation Schools and ALMC with specified data collection needs.

Assuring Quality

The TRADOC-mandated mission focus area involves developing graduate, supervisor, end-of-course-critique, and difficulty, importance, and frequency (DIF) model surveys for all courses taught at the school that the External Evaluations Branch team

supports. Each team emails graduate surveys to both Active and Reserve component sustainment Soldiers 6 to 18 months after they graduate from a course to obtain feedback on how well the Soldiers can execute the critical tasks associated with the institutional training they received.

Administration of supervisor surveys is conducted by the quality assurance elements within each school for Active component courses and monitored by the External Evaluations Branch team leaders. Supervisors are asked to evaluate how well course graduates they supervise can execute critical tasks associated with the institutional training. The External Evaluations Branch continues to work with Reserve component evaluators in the DL2/QA directorate to solicit course manager support for the administration of supervisor surveys for courses taught in Army National Guard and Army Reserve schools.

Each team develops executive summaries from graduate and supervisor feedback and gives them to the quality assurance element leader in each school to support ongoing course assessments. The results of these surveys are reported to TRADOC on a semiannual basis for a review and analysis with the TRADOC commanding general.

At the request of the CASCOM Training Directorate, each External Evaluations Branch team leader develops DIF model surveys to support critical task selection boards (CTSBs). The DIF model surveys are emailed to subject-matter experts specified by the Training Directorate. Executive summaries are developed by External Evaluations Branch team leaders for the Training Directorate so the directorate can provide training recommendations to the CTSBs. End-of-course-critique surveys are developed by the External Evaluations Branch for exclusive use by course managers in the schools. All supervisor survey instruments are posted on the DL2/QA website at www.cascom.army.mil/QA/QA_Surveys2.htm.

Supporting Information Needs

The special mission focus area of the External Evaluations Branch concerns the specified collection needs of a wide range of customer organizations within CASCOM, the directly supported schools, ALMC, and organizations outside of CASCOM. Regardless of the collection instrument selected, the overarching methodology includes the same phases: plan, design, test, deploy, collect, analyze, and report findings.

In the plan phase, a clearly defined problem statement must be provided by the customer. The design phase is a collaborative undertaking by the customer and the External Evaluations Branch. Collection instruments are tailored to meet the customer's specific collection need. The remaining phases—collect,

analyze, and report—are conducted by the External Evaluations Branch. Collection instruments must be designed with the end-state analysis clearly in mind. During the analyze phase, feedback from studies, surveys, and interviews is routinely triangulated (crosswalked) with independent data searches performed in the Lessons Learned Integration Branch and with feedback solicited from the CTCs to further validate trends before findings are reported to the customer.

The need for change across DOTMLPF products and services supporting sustainment Soldiers and their organizations has never been greater. The speed and accuracy with which CASCOM leaders and decisionmakers are able to complete their respective assessments of their products require a steady flow of reliable information about "what right looks like." Collectively, the A&I Division is providing a unique and dynamic capability to CASCOM that was not available in the past and is not currently known to reside in organizations elsewhere in the Army. This capability represents a "tool box" of sorts, from which the CASCOM commanding general and his supporting staff and the functional proponents at the Transportation, Quartermaster, and Ordnance schools and ALMC and their supporting staffs can select an option, or a combination of options, most appropriate to meet their information collection needs.

The A&I Division continues to generate improvements in the quantity and quality of feedback for doctrine, training, and combat developers within CASCOM, as well as the functional proponents and course managers in the schools charged with training our sustainment Soldiers. This capability enables leaders and decisionmakers to decide more quickly and with greater confidence "what right looks like," thereby making DOTMLPF requirements decisions that result in more timely and relevant products and services to support CASCOM's principal customer—sustainment Soldiers and the organizations to which they are assigned throughout the Army. **ALOG**

Earl C. Driver is a logistics management specialist in the External Evaluations Branch, Analysis and Integration Division, Directorate of Lessons Learned/Quality Assurance, at the Army Combined Arms Support Command at Fort Lee, Virginia. A retired lieutenant colonel, he is a graduate of the Adjutant General Officer Basic Course, the Army Medical Department Officer Basic and Advanced Courses, and the Army Command and General Staff College. He holds a bachelor's degree in government from Eastern Washington University and a master's degree in public administration from Central Michigan University.

Warrior Logisticians: Establishing an SSA From the Ground Up

by First Lieutenant Brice R. Westhoven

The 9-week, 2-day course for the automated logistical specialist (military occupational specialty 92A) teaches Soldiers to be "warrior logisticians." But the true test of these Soldiers' abilities comes when they are called upon to establish an operational supply support activity (SSA) from the ground up in a combat environment in less than 72 hours.

No deployment put the logisticians of the 3d Infantry Division Combat Aviation Brigade (CAB) to the test more than the recent deployment in support of Operation Iraqi Freedom 06–08 that began in May 2007. The 3d CAB was prepared to deploy to Contingency Operations Base (COB) Speicher in Tikrit and conduct a relief-in-place with the 25th Infantry Division CAB. COB Speicher had an operational SSA and a mature authorized stockage list (ASL) that the 3d CAB expected to assume. The planning and the predeployment site survey were complete, and the last few touches on the concept of support were being finalized.

However, a decision to put a surge of forces in Iraq quickly changed mission requirements and shifted the CAB's destination from COB Speicher to Camp Striker at Baghdad International Airport. For the warrior logisticians of the 3d CAB SSA, this meant a quick revision of the ASL and a larger deployment packing list since they would not have an existing SSA to fall in on. They were challenged with the task of establishing a large SSA from the ground up in a limited time and in an unfamiliar area.

Preparing to Deploy

The rigors of this daunting task were welcomed by the Soldiers of Alpha Company, 603d Aviation Support Battalion. Before the Soldiers even left their home station at Fort Stewart, Georgia, the predeployment process ensured mission success. The first step was to conduct an ASL review using dollar cost banding—an algorithm developed by the RAND Corporation for determining the ASL for SSAs—and tailor the ASL based on the recommendation submitted by RAND. Based on theater trends, this review provided the SSA with the best inventory. Lines were added later to the ASL because of the change in the deployment timeline and location. However, the support operations office (SPO) worked diligently to ensure that the zero-balance lines were aggressively worked in order to establish an adequate ASL.

Before load up for departure from Fort Stewart, the Soldiers of Alpha Company completed a 100-percent inventory of their ASL and ensured that the load plans reflected the exact storage locations by container or vehicle bumper numbers. Most of the items were loaded in containers, but some of the bulk items were secondary loads on flatbed trailers. It was important to ensure that all ASL containers were identified as high priority and moved on the first common-use land transportation assets available. Some of the ASL containers were not given priority in the push north. However, the detailed load plans and an accurate deployable equipment list kept the unit aware of exactly which equipment was missing. In-transit visibility also facilitated the ease of tracking where the ASL was and when it was scheduled to arrive.

Preparations on Site

Actions during reception, staging, onward movement, and integration were critical to rapidly establishing the SSA. The Standard Army Management Information System (STAMIS) gunnery (a process for checking systems to ensure that they are up and communicating) validated the Standard Army Retail Supply System and ensured that the correct unit identification codes and Department of Defense activity address codes were loaded and that the STAMISs could communicate.

Several 92A Soldiers were sent with the advance party to prepare the warehouse. The Soldiers embraced their new home, which was missing a wall and had a good, thick layer of dust and dirt on the floor and pigeons nesting in the rafters. For these reasons, it was not the warehouse of choice; however, the Soldiers went to work and turned the formerly abandoned warehouse into a usable logistics hub.

Although an inventory of the ASL items was not needed when the containers arrived (since an inventory had been completed before shipping and the containers were sealed), one was conducted anyway to confirm the prior inventory. A thorough inventory was completed less than 72 hours after the ASL items arrived. Once the containers were moved into location

At left: Large items kept in the supply support activity are stored warehouse style. Below: The supply support activity issue section uses metal bins to sort items to be sent out. Note the containers in the background that are used for storage.

sequence, the SSA became the first fully operational logistics node in the brigade.

Containers

The success of getting the SSA operation in record time was largely due to the use of Boh Environmental, LLC (BOH), containers, including the BOH Cargo 6, BOH Cargo 12, and BOH field pack-up (FPU) 8–2 containers and the expandable wall command center (EWCC).

The BOH Cargo 6 is a retractable, one-door container that has adjustable shelves inside. It is used primarily for bulk items. The BOH Cargo 12 is a larger version of the Cargo 6. This container with four bifold doors is also used for bulk items and parts and can accommodate a parts rack with drawers, a bulk rack with pallets, or a floor load with tiedown rings.

The FPU 8–2 is a custom-made, multifunctional steel container with two doors on each side. The inside is custom made to fit four modules with drawers. The FPU 8–2 can actually accommodate 27 different types of modules and glide-out drawers. This container is primarily used for smaller parts in the ASL. However, it can be configured to accommodate larger parts by removing as many of the modules as necessary.

The EWCC boasts three two-person slide-out workstations. It has one door on each end and comes with a fixed window, electrical raceways with outlets, switchable red and white lighting, six computer workstations with desks, a phone connection, five locking file cabinets, and a grounding lug.

Container Advantages and Disadvantages

One advantage of using these containers is the enhanced mobility they offer. All of them can be transported by land, sea, or air. They were prepacked for use at the SSA, and they arrived just as they had

been packed. The BOH containers did not require blocking and bracing since the interior modules were securely in position, there was no metal-to-metal contact, and a net was used instead to secure the contents of plywood. A 10,000-pound forklift was all that was needed to arrange the containers in the desired sequence for use.

Another advantage of using the containers is the modularity that they provide. A push-package to a combat training center, other forward operating bases (FOBs), or training exercises could be easily assembled by identifying which modules inside the FPU–8 were needed. Full access to the materiel was another benefit; when the doors to these containers were opened, the items were right there. The modules have a custom configuration that allows them to be arranged to fit exactly what needs to be held. The all-steel construction makes these containers extremely durable. Not only are these containers suited for ASL items; they also can hold bench stock and prescribed load list supplies just as well.

The EWCC offers the advantage of housing computers in an office-like structure rather than in a warehouse. If the computers were in the warehouse, they would not last long with all the dust and dirt that accumulates in a desert environment.

Despite all the benefits that the BOH containers offer, they have some drawbacks. First, the 3d CAB did not use the FPU 8–2's retractable door feature, which allows doors to slide into the side walls to create an open-face BOH. If this feature were not there, the 4 inches on each side of the container where the door retracts could provide an extra 8 inches of drawer space. That may not sound like much, but the space adds up when one considers the number of containers that the 3d CAB used.

A second disadvantage is the cost. These BOH containers are expensive. The FPU 8–2 costs $22,366. The BOH Cargo 6 costs $11,477, and the BOH Cargo 12 costs $18,442. The different modules are approximately $10,000 each, and the drawers are about $1,000. The EWCC is a whopping $88,144.

Old Containers Versus New Containers

The ISU–90 containers and M129 semitrailer supply vans are in competition with the newer, more versatile BOH containers. The ISU–90 is a larger container than the BOH container, but it holds fewer ASL items. The ISU–90 also requires blocking and bracing. Imagine opening a door to a container to inventory its contents, only to see secure plywood and two-by-fours challenging you to tear them down just to get to the ASL. Now imagine doing that with close to 40 ISU–90s, and remember that each ISU–90 has a set of doors on each side.

The M129 van has some good qualities, like mobility, but it does not compare to the Cargo 12. The M129 van has a much smaller door that larger parts cannot fit through, which reduces the overall capability of the container. And the M129 van is not configured with cabinets or drawers. The drawers and shelves used by Alpha Company were contracted through Stanley Vidmar at an additional cost to the $85,000 price of the M129 van.

Providing Responsive Support

Today's modular Army is prepared to establish operations and support multiple locations simultaneously. Logisticians are required to adjust their methods in order to provide responsive support to their customers. The 3d CAB occupied three additional FOBs, so the SPO immediately identified the requirement for designated "lanes" to support forward customers. The SSA platoon set aside a specific number of pallets and labeled each by its FOB. The SPO coordinated for regular pushes to the FOBs and relied on the company's slingload team to establish logistics packages for delivery by slingload or to deliver internal loads of every class of supply.

Alpha Company quickly realized it needed slingload equipment, which was not on its modification table of organization and equipment (MTOE). The supply sergeant aggressively worked to meet the requirements, and an MTOE change request was submitted. Distribution companies like Alpha Company should be authorized at least ten 10,000-pound sling sets, four 25,000-pound sling sets, four cargo reach pendants, and four 5,000-pound cargo nets. These items allow the distribution company the versatility of resupplying its customers by air.

Another needed MTOE change was the addition of a 4,000-pound forklift. Although the MTOE for Alpha Company allocated an all terrain lifter, Army system (ATLAS), a 4,000-pound forklift would have offered much more maneuverability within the warehouse. A request was submitted for a contracted commercial forklift as a short-term solution.

In the CAB, an aircraft on ground (AOG) was a significant reduction of combat power. The process for obtaining AOG parts had to be clearly briefed and followed. The SPO AOG representative emailed a list of the AOG parts to the SSA. A printed copy of this list was sent to the receiving and issue sections of the SSA. When the receiving section was processing parts, an AOG part was easily identified by the document identifier code, which included "AOG" and the last four numbers of the serial number (predesignated as a 9000 series). After the AOG part request was processed, the part was handed over to the issue section, where it was placed in a bin dedicated for AOG parts. The issue section logged it in the book and then gave the SPO AOG representative a call. The representative then informed the customer that its AOG part was in the SSA. If the AOG remained in the bin for over 1 hour, the issue section immediately gave the SPO AOG representative another call and notified the SSA technician and company commander.

Each mission and location will create a different set of challenges and benefits. Soldiers will learn the technical aspects of their jobs in due time, so the Army Quartermaster Center and School should ensure that its curriculum trains young Soldiers to be creative, adaptive, and flexible. The course should give Soldiers a basic knowledge but also challenge them to come up with solutions and engage in problem-solving techniques. The warrior logisticians of the Alpha Company, 603d Aviation Support Battalion, 3d CAB, accomplished their mission not only by technical competence but also by combining techniques that served well in the past with innovative measures. **ALOG**

First Lieutenant Brice R. Westhoven is the supply support activity platoon leader for Alpha Company, 603d Aviation Support Battalion, 3d Combat Aviation Brigade, 3d Infantry Division, which is deployed to Iraq. He holds a bachelor's degree in sociology from John Carroll University and is a graduate of Basic Officer Leader Course (BOLC) II and III.

Helpful Thoughts for Junior Leaders

by Lieutenant Colonel Kenneth Long, USA (Ret.)

A retired lieutenant colonel shares leadership advice for new leaders based on his years of experience as an officer and a manager.

Leadership plays a central role in Army doctrine, and properly so. The difference between good units and great units is the quality of their leadership. Leadership ties the warfighting functions together to create the combat power the Army needs to accomplish its missions.

If leadership is the engine that drives us to success, then management can be thought of as the transmission that transforms the engine's output and applies power to the wheels. Transmissions ensure that we are efficiently covering the ground on our journey to the objective. Just as every Soldier is a leader, every Soldier is a manager concerned with teamwork, the allocation and economical use of resources, and the effective accomplishment of our missions.

My views on management originated from observing the habits and practices of the great leaders under whom I have worked. Those views have been tempered by extensive military and civilian management literature and practice in the field, and they have been refined in Army Command and General Staff College classroom discussions. My experiences as an Army leader and manager have taught me to follow some management tactics, techniques, and procedures (TTP) that can be applied by Army small-unit leaders at many levels.

Your Management Philosophy

The first set of TTP apply to staff leaders, such as battalion or company executive officers, who are facing the challenge of organizing a diverse staff for success in a resource-constrained environment. I strongly recommend that you give your staff your management philosophy in writing and discuss it with them, just as you would with the written commander's intent. Your management philosophy helps young officers and Soldiers develop the inner dialog that shapes how they think. Managers should consider the following suggestions when forming their management philosophy.

Write well. Extraordinary power exists in well-crafted written communication, and less is usually more. Good writing is good rewriting. Well-written communication will help your staff internalize your intent so they know how to act without your presence in a manner that is consistent with what your guidance would have been.

Be positive. Take care to write affirmatively and communicate your enthusiasm for all the goodness that comes out of doing things the right way. Do not spend a lot of time examining the exceptions to the rule; do not get lost in the weeds. Acknowledge the guidelines, but point out the importance of applying judgment to specific cases and circumstances.

> **If leadership is the engine that drives us to success, then management can be thought of as the transmission that transforms the engine's output and applies power to the wheels.**

Tell them why. Make it clear that you will always explain why you do particular things and why you do them in a certain way. Explaining the reasons behind your decisions is another way you help them understand your philosophy and intent, and it will carry over to everything else you do from that moment forward. Not telling them why should be the exception. The most important part of the operation order process is making sure everyone understands the plan; it should also be the most important part of administration and management plans.

Headlines speak volumes. Packaging and formatting are very important in this age of instant gratification and commercial breaks. Society focuses on sound bite, so give your Soldiers and staff sound bites they can use.

One-pagers are powerful. A one-page memo communicates most effectively, and your staff may actually read the memo if it is not so long and cumbersome. Short memos set a good standard for all staff products.

Let them help you. Your notes and plans for your own personal accomplishments and project management are a great place to start when writing to your staff

about where they fit in the plans. Share your personal and professional goals, as appropriate.

Know your audience. Read it from their perspective, see where they will find fault, and then fix it. Try to keep in mind how they could possibly misinterpret what your wrote.

Solicit recommendations. Act within your authority, and when it is beyond your scope, ask your Soldiers for recommendations. Soldiers, of course, should know the difference between recommendations and dissension and where the boundary lies. When they recommend actions, you can see if they are growing in maturity and understanding and if they are ready for increased responsibilities.   Hearing your Soldiers' recommendations also gives you an opportunity to check their understanding of the commander's intent. Their task of coming up with recommendations and your feedback to them will train them for future requirements.

> **There will never be a time when you are not comparing performance to a standard. You are a walking, talking, thinking inspection.**

Expand their awareness. When managing issues and projects, refer to the unit's area of interest and area of operations to train them to look at the big picture. Train them to approach issues by thinking about the entire system, and use operational terms they already use.

0100 inspections. Inspections at 0100 are what I do, what leaders do, how we get better, and how we confirm excellence and check compliance. There will never be a time when you, as a leader, are not comparing your Soldiers' and your staff's performance to a standard. You are a walking, talking, thinking inspection.

The Medical Metaphor

I found the medical metaphor to be especially useful in my role as an executive officer and primary staff officer at all levels from battalion through division. As a staff leader, you can think of yourself as the leader of a squad of doctors. Solve complex bundles of problems with the following systematic procedure—

• List the problems (the "patients") quickly and without priority.

• Assign problems to staff members according to specialty.

• Assess the consequences of neglecting those problems.

• Prioritize the problems based on importance.

• Perform "first aid" to stabilize the problems.

• Evacuate the problems to staff leaders for treatment and long-term follow-up care.

• Monitor the problems with a series of follow-up examinations.

• Develop a healthy unit lifestyle that helps preclude poor performance. A good command supply discipline program that is ingrained in all Soldiers as a value goes a long way towards prevention.

This set of TTP provides guidelines for your role as a manager and focuses on solving problems in a variety of areas when time and other resources are constrained. The most important part is making an initial rapid assessment of the situation to get things moving. The first step is the hardest step. Once in motion, solving problems tends to generate its own momentum. Triage well so that your unit gets a good start on solving problems.

Effective Leadership

Solving problems can be fun, but your effectiveness depends on how well you coordinate the actions of your team and line up the resources they need to get the job done. Help your Soldiers by fulfilling your role as a leader and focusing your own time on the following tasks.

Guidance. Convey to your Soldiers your vision of how they should solve the problem and the end state that you require.

Priorization. Provide integrated, effective coordination of effort in the proper sequence. Prioritize new actions among the efforts that are already underway. Try to find the right level of priority for all tasks—the first time.

> **The most important part of the operations order process is making sure everyone understands the plan; it should also be the most important part of administration and management plans.**

Management. Supervise tasks, conduct meetings to discuss your unit's progress, and monitor the suspenses that you set for your Soldiers.

Leadership. Focus on leadership in your actions, intent, vision, and professionalism. You are the standard, and your Soldiers are watching. You cannot expect your Soldiers to meet criteria that you do not meet yourself.

Different commodities require different levels of attention and management, so your goal is to find the right things to check, by the right people, to the right standard, with a well-calibrated gauge, and with enough frequency to keep the unit from drifting out of compliance.

Standards of performance. Communicate the standards and the methods and frequency of your inspections. Follow through with persistent, consistent execution.

Resources. Pay attention to your resources, such as time, money, tools, equipment, facilities, energy, labor, and knowledge. Recognize the importance of another type of resource—support from higher headquarters and technical staffs.

Integration and coordination. Make sure that your unit is working together—and with other units—efficiently and effectively. Ensure that the tasks a Soldier completes do not impede another Soldier's tasks, and avoid duplication of effort.

Judgment. Make decisions about resourcing and prioritization based on facts and in a timely manner. Make plans to follow up on those decisions.

Wisdom. Maintain the view of the big picture. Focus on the long-term view while meeting short-term needs.

Risk management. Consider the importance of the task (or its consequences) and then identify the appropriate method of supervision: act then advise, or recommend then act.

The Solutions

Categorizing your responsibilities can help organize your actions into an integrated, achievable plan.

Short-term actions. Short-term actions are the responsibilities that cannot wait. Using the medical metaphor, they are the actions you must take to stop the bleeding, treat for shock, and stabilize the patient. These actions must be completed immediately to limit further damage. An important consideration is the possibility of legal or nonjudicial ramifications, so you must always consider the legal, moral, and ethical dimensions and make sure nothing in your immediate action drill precludes the ability to take appropriate remedial action later on.

Long-term actions. Untangling the metaphorical hairball can be a time-consuming, multistep process. Ultimately, your goal is to establish a long-term systems management program that prevents hairballs from occurring. But we are rarely afforded the opportunity to just throw the hairball away. No,

they are ours to untangle, and management plans are required to untangle it as quickly as possible. Once untangled, our systemic fix should ensure that we never get back to that place again.

Systems management. The goal of your system checks is to ensure that any problems you uncover based on your metrics are of the short-term variety. Simple preventive maintenance checks and services of your commodities are sufficient to keep you on track and in compliance. Different commodities require different levels of attention and management, so your goal is to find the right things to check, by the right people, to the right standard, with a well-calibrated gauge, and with enough frequency to keep the unit from drifting out of compliance.

Watching for icebergs. Having an effective staff to efficiently manage the routine checks will free you to become a pilot and watch the horizon for danger and for opportunities. As the leader, you cannot afford to become decisively engaged in the "daily grind" of everyday routines. You have to carve out some discretionary time for yourself. Systems management will help you do that.

Focusing our education on leadership is fashionable and sensible. Also important, in my opinion, is addressing the minor art of management so that you can translate the commander's intent into organized and coordinated actions that will lead your unit to a successful end state. These suggestions have served me well in achieving that outcome as a staff leader in a variety of Army units at all levels between company and division, and it is my hope that some of them may help you as well. **ALOG**

Lieutenant Colonel Kenneth Long, USA (Ret.), is currently the chief of curriculum development for the Directorate of Logistics and Resource Operations at the Army Command and General Staff College at Fort Leavenworth, Kansas. He served 20 of his 25 years on active duty in command and staff positions in tactical units from company through division, in both combat and combat service support units.

Understanding the Supply Chain Operations Reference Model

BY MAJOR MICHAEL B. SIEGL

Applying the Supply Chain Operations Reference model to military logistics can be a powerful tool to improve the Department of Defense's supply chain.

The Department of Defense (DOD) supply chain is a multibillion-dollar business. However, like supply chains in the commercial sector, new developments in technology, organization, and processes have not been incorporated into the DOD supply chain uniformly because the DOD supply chain is a conglomeration of different supply chains, both commercial and military. In many cases, these different supply chains are linked only by the fact that they provide supplies to DOD personnel. Because the DOD supply chain is enormous, making it even slightly more efficient could result in tremendous cost savings.

The Supply Chain Operations Reference Model

In the commercial sector, many Fortune 500 corporations have used a tool called the Supply Chain Operations Reference (SCOR) model to decrease costs, increase revenues and profits, and improve their strategic competitiveness. To achieve some unity of effort, improve performance, and reduce costs with the goal of meeting customer demand satisfaction, DOD 4140.1R, DOD Supply Chain Material Management Regulation, directed that "DOD Components shall use the supply chain operational reference processes of Plan, Source, Maintain/Make, Deliver, and Return as a framework for developing, improving, and conducting material management activities." Therefore, logisticians should have a general understanding of the SCOR model.

Some in the military may decry the use of business best practices and solutions for military logistics problems because of the unique challenges placed on the military supply chain, especially during wartime. But, at the strategic level, military and private organizations are driven by similar opportunities and constraints. They must address the logistics issues of acquisition, distribution, sustainment, and disposition and disposal. No doubt, adopting blanket business solutions and practices and applying them with little thought to the DOD supply chain would be problematic. However, many of the problems faced in today's DOD supply

chain are the same ones that the commercial sector has dealt with or is currently facing.

Adopting business best practices that fit the military's circumstances and using a tool such as the SCOR model can help improve the effectiveness of the DOD supply chain. The SCOR model is not an overarching strategy for supply chain operations; it is a tool that can help DOD achieve its strategic goals. Ultimately, this helps the warfighter at the tactical level.

Managing the Supply Chain

Effective supply chain management originates from understanding the needs of the customer at the end of the supply chain (the warfighter). It requires developing and establishing metrics across the entire supply chain based on those needs. The SCOR model provides a medium for looking at the entire supply chain to determine how to best meet the warfighter's requirements. On a daily basis, logisticians gather critical data, such as order backlog, order fill time, and days of inventory stock, that, when measured against metrics, can provide the means to improve performance. Understanding the metrics used by organizations across the chain allows for better synchronization. This understanding, coupled with better management of supply and demand planning, can lead to reduced costs and better performance.

Supply chain management integrates the key business processes outlined by the SCOR model. One cannot overestimate the amount of work it will take to create unity of effort across the DOD supply chain with its numerous organizations, such as the Defense Logistics Agency, the U.S. Transportation Command, all of the military services, and the commercial industries that support DOD. However, using the SCOR model and business best practices may make it a little easier.

The Supply Chain Council's SCOR Model

Two firms, the global management consulting firm Pittiglio, Rabin, Tood, and McGrath and the market research firm Advanced Manufacturing Research, organized the Supply Chain Council (SCC)—an independent, not-for-profit corporation—in 1996. The SCC's goal was to develop a standard SCOR model that facilitated effective communication and a common understanding through standard terminology and metrics among the supply chain partners. It began with 69 voluntary companies and now has close to

Soldiers from the 626th Brigade Support Battalion, 3d Brigade Combat Team, 101st Airborne Division, load a box of supplies onto a truck at Forward Operating Base Dragon in Iraq. The warfighter is the customer at the end of the DOD supply chain.
(Photo by TSgt. Adrian Cadiz, USAF.)

1,000 members. These members include such diverse transnational corporations as Coca-Cola, ExxonMobil, Microsoft, Heineken, and Siemens.

The SCOR model allows companies to examine the supply chain configuration and processes. It helps identify, define, and measure metrics across the entire chain. It also helps to identify poorly performing links in the chain by comparing them to business best practices. Industry studies have shown that corporations using the SCOR model have been able to reduce total supply chain costs through reduced inventories, increased accuracy in forecasting requirements, and improved order fulfillment time.

A Process Reference Model

The SCOR model is a type of process reference model (PRM). The PRM provides a common framework for looking at various dimensions, such as business process reengineering (BPR) and benchmarking, and integrates them into a holistic analysis. A PRM analysis begins with BPR, which focuses on improving the efficiency and effectiveness of the processes within an organization. The organization can look at four categories for possible improvements to its operations: resources, strategy, capacity, and technology. Under resources, people are the most significant factor, and capacity includes infrastructure and organization.

PRM also looks at benchmarking. Benchmarking quantifies the performances of similar organizations and establishes standards and objectives based on the "best" organizations. Essentially, benchmarking is the process of determining who is the very best in a particular process or service, who sets the standard, and what that standard is. PRM gives the organization a road map leading from its current performance to what the organization wants to accomplish in the future. However, just like any road map, the PRM is just a guide. It may not always meet the realities of the roads, but, like a driver traveling over unknown territory, an organization would have a difficult time achieving its strategy without such a road map.

The SCOR model contains standard process definitions, terminology, and metrics that allow an organization to describe, measure, and evaluate its supply chain processes and performance in relation to the "best-in-class" performances of similar companies. The model was designed to help organizations learn from others within and outside their industry. As a PRM, the SCOR model is able to analyze processes that cut across functional activities such as manufacturing, sales, finance, and marketing. Instead of focusing on specific functions within "stovepiped" departments, it can identify gaps or problems in the way process elements interact. This can be used to refine operations for greater efficiencies across the entire chain.

According to the SSC, the SCOR model does not attempt to describe certain business processes or activities "including sales and marketing (demand generation), research and technology development, product development, and some elements of post-delivery customer support." These interactions and activities affect supply chain performance and, therefore, are some of the limits of the SCOR model. But the SCOR model is evolving (it is currently on version 8.0), and newer versions will hopefully account for such activities in the future. While the model does not cover every aspect of supply chain operations, it is still comprehensive. The SCOR model covers customer interactions, product transactions, and market interactions. The model's span has been defined to reach from manufacturers to suppliers and customers, or from "the supplier's supplier to the customer's customer." In other words, it is an end-to-end framework that goes from "cradle to foxhole" with some gaps in the periphery.

The SCOR Hierarchy

The SCOR model is divided into a four-level hierarchical pyramid structure that represents a plan for improving supply chain performance. The SCOR model deals with three levels of processes, and the levels progressively increase in process detail and specificity. Level 4 deals with functional and organizational tasks instead of processes. At level 4, the organization implements the supply chain changes based on the design that the SCOR model helped create.

Level 1

Level 1 is the top level and defines the scope and contents of the SCOR model. This level defines the five management processes, which are plan, source, make, deliver, and return. These set the scope and parameters of all the other subprocesses within the supply chain.

Plan. Supply and demand planning is the fundamental process that runs the length of the supply chain. Essentially, an organization establishes and communicates plans for the whole supply chain, based on the SCOR model analysis. The key is balancing resources with requirements. An organization assesses aggregate supply resources and demand requirements to develop a plan that synchronizes and optimizes production, inventory, distribution, and initial capacity planning. This helps in developing a plan that can address all requirements.

Source. When sourcing stocked, make-to-order, and engineer-to-order products, an organization manages its sourcing activities and procures raw materials and services to meet its planned and anticipated demands. Vendor and supplier certification, negotiated vendor contracts, quality control, and materials receipt are included in this process.

Make. Producing make-to-stock, make-to-order, and engineer-to-order products deals with executing and managing the manufacturing, testing, packaging, holding, and releasing of products. It also deals with engineering changes and making finished products to meet the planned and anticipated demands. Under this process, an organization is concerned with infrastructure management, production status and quality, and short-term capacity.

Deliver. Ordering, warehousing, and transporting for stocked, make-to-order, and engineer-to-order products encompass order and credit management, warehouse and transportation management, distribution management, and inventory and quality control. It includes developing and maintaining databases for customers, products, and prices. This process is focused on delivering end products and services to meet planned and anticipated demands.

Return. Returning raw materials and receiving returns of finished goods include identifying the product condition and disposition and returning the product to the source. Return also deals with maintenance, repair, and overhaul.

The SCOR model also identifies five performance attributes for the supply chain at level 1. The first three attributes, which are reliability, responsiveness, and flexibility, are geared toward the customer. The next two, cost and assets, are internally focused. Linked to these attributes are 10 level 1 metrics. Organizations can use these level 1 metrics to measure if they are achieving their desired goals within their industries and how successful they are. The key is to understand that an organization is not likely to meet best practice norms in all metrics. Therefore, the ones an organization chooses to focus on should reflect its customers' needs.

Level 2

Level 2 is the configuration level. At this level, organizations analyze the material flow across the supply chain from end to end. They refine and align their processes with their organizational infrastructure based on the organization's strategy. For example, what types of products an organization produces and how it delivers them have an effect on how that supply chain is configured.

The SCOR model identifies core process categories that an organization can configure for its own operations. As the organization separates and breaks down its processes, it can further identify areas for improvement. At this level, the organization can conduct a "wargame" analysis to evaluate the impact of various courses of action that could improve performance. Some metrics at this level are linked to processes lower than level 1, and many of these level 2 metrics feed into the level 1 metrics.
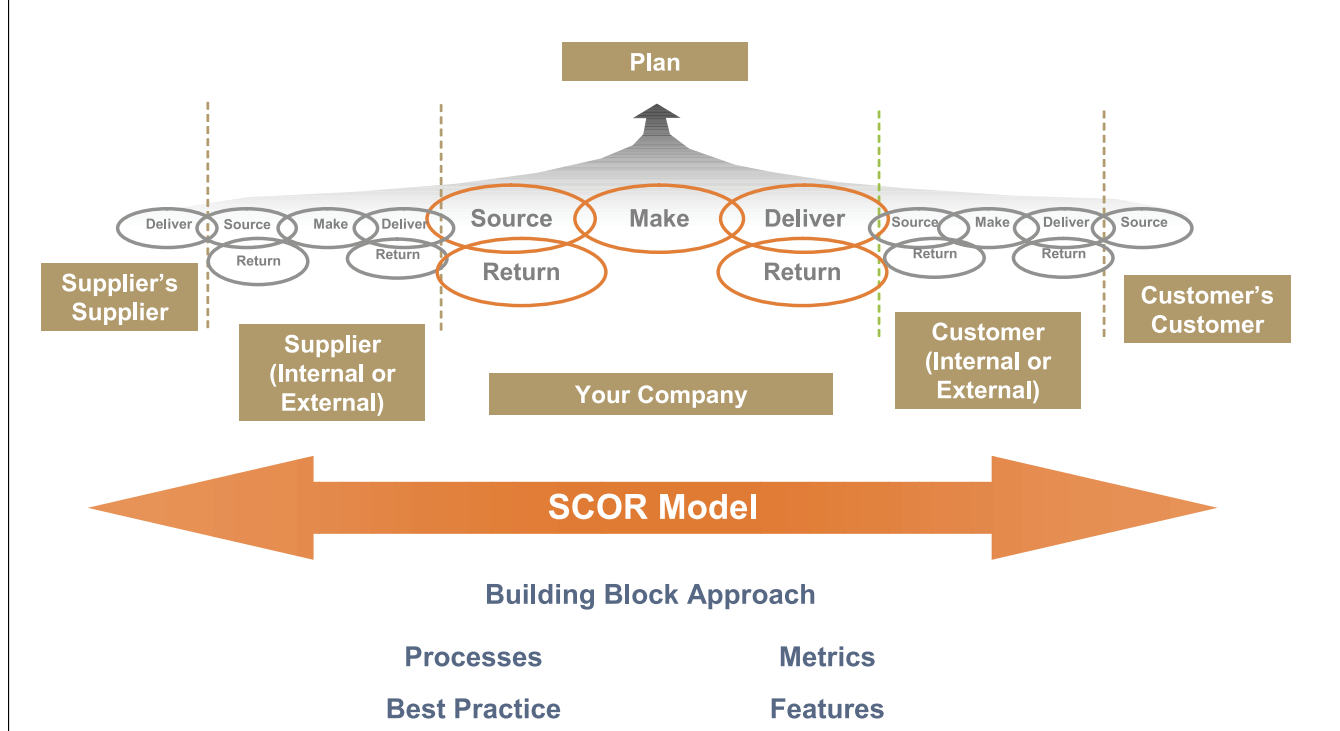
The five management processes—plan, source, make, deliver, and return—provide the organizational structure of the SCOR model.

Level 3

Level 3 is the process element level. This level drills deeper into the organization to detail how work and information flow throughout the organization's supply chain. It focuses on key transactions, including inputs and outputs, and looks at objectives, performance metrics, best practices, and the systems infrastructures and capabilities that support them. At this level, the organization can validate the impact of improvements along its supply chain. Level 3 is aligned with level 2 for corresponding performance standards and organizational systems and interactions.

Level 4

Level 4 is the level at which supply management practices are implemented. Activities at this level are specific to an organization and are focused on implementing tasks. These activities include focusing on organizational design, processes, systems, and individuals within the organization. These are outside the scope of the SCOR model since implementation is unique to each organization.

The Universal Joint Task List

A military analogy to the SCOR model could be the Universal Joint Task List (UJTL), which is published by the Joint Chiefs of Staff. While it is not a perfect analogy, the UJTL's intent is similar to that of the SCOR model. The UJTL serves as a common language and reference system for the military to ensure understanding across the forces. It provides the basis for the development of a joint mission essential task list

that military organizations can use to identify capabilities essential to mission accomplishment.

The UJTL provides an extensive integrated list of functional tasks, definitions, conditions, standards, and metrics. Units can use the UJTL to look holistically at capabilities and training to ensure mission success. While the SCOR model is concerned with processes and not functions, it does provide a common language and reference for organizations, enabling them to communicate clearly and manage, measure, and evaluate process elements to ensure customer satisfaction.

As with most tools, the SCOR model is only a guide. The success of any tool or process depends on organizations having a clear understanding of the capabilities and limits of that particular tool or process. It also requires organizations implementing and using the tool properly to maximize its potential. Employing the SCOR model and business best practices, when adapted to meet military circumstances, can be powerful methods to improve the DOD supply chain, which is inextricably linked to commercial industry. **ALOG**

Major Mike Siegl is the battalion executive officer of the 204th Brigade Support Battalion (Rough Riders), 2d Brigade, 4th Infantry Division. He received a B.A. degree from Stanford University and an M.A. degree from Georgetown University. He is a graduate of the Quartermaster Officer Basic Course, the Combined Logistics Captains Career Course, and the Army Command and General Staff College.

BCT Logistics in Al Anbar Province

BY MAJOR MARK D. PIKE, PAARNG

In June 2005, the 2d Brigade Combat Team, 28th Infantry Division (2–28 BCT), Pennsylvania Army National Guard (ARNG), deployed to Al Anbar Province, Iraq, and began a year of sustained counterinsurgency operations against Al Qaeda and various Sunni extremist organizations. The 2–28 BCT was composed of a dynamic team of Army National Guardsmen from 34 states. The BCT was attached to the II Marine Expeditionary Force (MEF) and Multi-National Force-West (MNF–W) and given its own battlespace in and around the volatile city of Ramadi. Upon the 2–28 BCT's arrival in theater, the MEF gave it one Marine infantry battalion and one Army maneuver battalion for the duration of the deployment. In addition, the BCT's partnered Iraqi Army units grew from approximately one brigade when it arrived in Ramadi to more than three brigades when it redeployed.

During its 12-month deployment, the 2–28 BCT received an average of 42 significant activities per day in the form of small-arms fire, improvised explosive devices (IEDs), complex attacks, or indirect fire within its assigned area of operations (AO). Within this tactical environment, the 2–28 BCT logistics team began the difficult work of sustaining the brigade and its Iraqi Army and Police partners.

Logistics Command and Control

The 2–28 BCT deployed as a legacy organization. As such, the 228th Forward Support Battalion (FSB) (Pennsylvania ARNG) was an Army of Excellence support battalion and lacked the robust, organic distribution capability of a modular brigade support battalion. Logistics in Iraq was service-provided, and the 2–28 BCT operated without the logistics enablers that would have been provided by a main support battalion (MSB). MNF–W had both a Marine logistics group (MLG) and an Army corps support group (CSG) that provided general support (GS) logistics to units operating in Al Anbar Province.

Geographically, the units of the BCT operated from four forward operating bases (FOBs) and were separated by Lake Habaniyah and the city of Ramadi. The MLG was in the eastern AO and occupied Al Taqqadum Air Base, which was the principal Marine GS supply point for Al Anbar Province. The 2–28 BCT's supporting corps support battalion (CSB) also

occupied Al Taqqadum Air Base. Consequently, the 228th FSB(–) and support operations office (SPO) occupied Al Taqqadum Air Base in order to tie into the corps support area and available MLG logistics assets.

The BCT headquarters, other subordinate units, the FSB medical company, and one maintenance company occupied Camp Ramadi in the western AO. Doctrinally, the SPO and BCT S–4 office should collocate. However, given the dispersion of the BCT's maneuver battalions, the decision was made to operate in a split-operations mode. To ensure synchronization of logistics to the BCT, the SPO placed a strong liaison officer (LNO) in the BCT S–4 office.

The SPO LNO and the BCT S–4 plans officer collaborated for logistics planning. The LNO also coordinated directly with the two FSB companies at Camp Ramadi to ensure that direct support (DS) was being provided to BCT units in the western AO. The SPO traveled from Al Taqqadum Air Base to Camp Ramadi and participated in all brigade-level military decisionmaking processes (MDMPs). While planning for the Ramadi saturation operation in the spring of 2006, the SPO shuttled between the MEF G–4 staff at Camp Fallujah and the 2–28 BCT staff at Camp

Ramadi. In the interim, the SPO and BCT S–4 communicated continuously via digital nonsecure voice terminal and secure email, and logistics support to the brigade was continuous.

Ideally, the SPO and BCT S–4 would collocate, but that arrangement is not essential. The success of logistics synchronization within a BCT often comes down to intangible assets: personalities. Regardless of location, if the SPO and S–4 and their respective staffs have a positive, professional working relationship, logistics will work for the BCT. If not, it will fail.

Tactical Transportation

One of the greatest logistics challenges that the FSB faced during its deployment was a shortage of organic transportation assets. Because the BCT operated as part of the MEF, it lacked the benefit of an MSB's organic truck company. For example, it was not uncommon to wait a month to receive needed heavy equipment transporter (HET) support. During the first 3 months of the deployment, all HET support came from a single Marine HET platoon based at Camp Fallujah. The vast number of taskings for the Marine HET platoon throughout Al Anbar Province and the lack of HET assets within the supporting CSB on Al Taqqadum Air Base forced the BCT either to find creative solutions for meeting HET requirements or to wait until the movement control team could send HETs from Kuwait. Fortunately, the 620th CSB on Al

Combat vehicles destined for the Iraqi Army are loaded onto a 228th Forward Support Battalion truck. The Iraqi Army depended on the brigade support team to provide almost all of its logistics support in the Ramadi area.

Taqqadum Air Base redeployed and the new 44th CSB had several HETs and provided responsive HET support to the FSB for the remainder of the deployment. HETs were the only assets capable of evacuating battle-damaged combat vehicles over long distances from the battalion FOBs to the FSB cannibalization point on Al Taqqadum Air Base.

After the SPO returned from the BCT predeployment site survey in March 2005, it was clear that lack of responsive transportation was a significant problem within the AO. So the FSB created a transportation section out of hide at Mobilization Center Shelby, Mississippi, to meet the forecasted mission requirements. This ad hoc transportation section consisted of 25 Soldiers, with half based at Camp Ramadi providing DS to units there and half based at Al Taqqadum Air Base supporting BCT units in the eastern AO.

Two FSB personal security detachments also were created. These detachments provided the FSB S–2/3 with organic, well-trained security assets that were used in a variety of different roles, such as combat logistics patrol (CLP) escorts, quick reaction force (QRF) escorts, Iraqi Army and coalition force (CF) leave run escorts, and brigade support area defense missions.

Doctrine is only a guide. The operational environment ultimately dictates mission requirements. In combat, leaders must be flexible and willing to break with doctrine to ensure mission success.

> **The training was maneuver-oriented and focused primarily on survival on the battlefield of Iraq. Although this training was vitally important, the training schedule rarely allowed the BCT maintainers to practice and train on their technical MOS skills.**

Because of the enemy threat within the BCT's battlespace, KBR truck assets would not operate on BCT main supply routes (MSRs). So, transportation support to CF and Iraqi Security Force (ISF) units was left completely up to military assets. When transportation requirements exceeded the FSB's capabilities, the BCT would either employ palletized load system (PLS) assets from the Utah ARNG 2d Battalion, 222d Field Artillery Regiment's (2–222 Field Artillery's) service battery or the SPO coordinated with the 44th CSB to reinforce truck support. On some occasions, the FSB was forced to use supply support activity (SSA)

personnel, mechanics, and headquarters personnel as drivers, assistant drivers, and gunners in order to meet rapidly emerging ISF transportation requirements. This caused a degradation of logistics support to the entire BCT. Through April 2006, the FSB ad hoc transportation section ran over 170,000 miles within the BCT's battlespace.

In 2005, during the October referendum and December elections, more than 1,000 concrete barriers of all sizes and hundreds of pallets of class IV (construction and barrier materials) were pushed to the many election sites by the FSB and 44th CSB truck assets. During the spring of 2006, the BCT constructed six hardened Iraqi police stations and company-sized ISF combat outposts within the heart of Ramadi. Emplacement of these sites was transportation intensive and included movement of thousands of concrete barriers and hundreds of pallets of class IV construction materials. The FSB's truck assets included up-armored M923 5-ton cargo trucks, M1088 tractor trucks, and PLS truck systems. The military occupational specialty (MOS) 88Ms, motor transport operators, would frequently change systems to meet the specific mission requirements, such as ISF troop transport missions, CF and ISF leave runs, movement of class IV, or routine sustainment pushes.

Combat Logistics Patrol Protection

The primary threat to BCT CLPs along MSRs was command-detonated IEDs. For example, on the eastern portion of one BCT MSR, the distribution platoon of the 2d Battalion, 69th Armor Regiment, was hit by IEDs more than 50 times within a 6-month period while conducting routine CLPs between the battalion FOB and the brigade support area. As a result, the FSB S–2/3 developed tactics, techniques, and procedures (TTP) that called for conducting CLPs at night only in blackout conditions, using night vision goggles (NVGs). Infrared chemlights were used very effectively as a means of marking routes, switchback lanes across the MSR medians, and large IED holes scattered along the MSR. Since the insurgents with the IED triggers did not have night vision capability and could not gain a solid reference or trigger point, the IEDs usually detonated with minimal damage to CF vehicles and, most importantly, with no CF casualties.

Problems arose when non-BCT units that were not proficient with NVG operations or third-country national contractor trucks with white lights joined BCT convoys. The FSB S–2/3 worked with the supporting CSB to ensure that their 88M Soldiers were trained and familiar with the FSB's TTP. TTP were also developed to handle third-country national white light convoys that joined FSB CLPs. In addition to NVG usage, the FSB S–2/3 coordinated with the BCT S–3 for IED route clearance support by MEF Buffalo and

The 228th Forward Support Battalion maintenance support team works on an M2A2 Bradley fighting vehicle pack at Forward Operating Base Habaniyah, Iraq.

Meerkat assets before all FSB CLPs. Despite these efforts, the insurgents were still capable of rapidly reseeding IEDs after MSRs were cleared. CLP start point times were continuously changed to eliminate predictability for insurgents.

All Soldiers should arrive in the combat zone fully trained to conduct NVG operations. This would ensure continued CF dominance of night operations and will greatly reduce risk to Soldiers.

Maintenance Operations

Much of the BCT's time at Mobilization Center Shelby was spent conducting mandatory First Army individual and collective training. The training was maneuver-oriented and focused primarily on survival on the battlefields of Iraq. Although this training was vitally important, the training schedule rarely allowed the BCT maintainers to practice and train on their technical MOS skills. The first chance the BCT had to conduct hands-on maintenance training was at the end of the post-mobilization training cycle, when mechanics provided maintenance support to the BCT Bradley and tank ranges in April 2005. The 3656th DS Maintenance Company (Mississippi ARNG) maintained the BCT's fleet during most of the time spent at Mobilization Center Shelby. Maintenance management was a training priority for the First Army trainers at Mobilization Center Shelby. The FSB established the BCT's Standard Army Management Information System (STAMIS) architecture and maintained the daily 026 Report, originally by disc drop from the Standard Army Maintenance System-1 and later via email. The brigade conducted daily maintenance meetings, which helped build the maintenance team within the BCT.

First Army also authorized BCT units to increase unit prescribed load lists and permitted both FSB maintenance companies to build a substantial shop and bench stock before deploying. These measures provided the BCT with enough on-hand stockage of class IX (repair parts) to sustain itself through the first 30 days in theater.

Since post-mobilization training of ARNG support units is maneuver based, it is imperative that premobilization training is focused on building technical MOS skills. If not, combat service support Soldiers arrive on the battlefield poorly trained in their core, individual MOS-specific tasks.

The BCT's equipment density in Iraq eventually consisted of nearly 1,700 pieces of rolling stock, 200 generators, 2,400 radios, and more than 7,000 small arms and weapon systems. Fortunately for the BCT, maintenance units at both the organizational and DS levels had a core of experienced, full-time maintenance technicians who were able to bring their traditional ARNG Soldiers up to MOS proficiency after they arrived in Iraq.

Army Forces Command mobilization planners provided the FSB with an additional maintenance company, the 779th GS Maintenance Company (Tennessee ARNG), in order to successfully maintain BCT equipment once deployed to Iraq. Without the additional maintenance company, the BCT would have struggled to sustain an acceptable operational readiness rating once in Iraq, given the density of supported equipment.

FSB maintenance units completed a total of 7,700 DS work orders in Iraq. This included the maintenance support teams supporting the 1st Battalion, 110th Infantry Regiment (Pennsylvania ARNG); 1st Battalion, 172d Armor Regiment (Vermont ARNG); 2-222 Field Artillery (Utah ARNG); 876th Engineer Battalion (Pennsylvania ARNG); and 1st Battalion, 506th Infantry Battalion (Regular Army). In addition to supporting BCT equipment in Iraq, the 779th GS Maintenance Company provided a significant level (622 DS work orders) of area support maintenance to numerous non-BCT units that operated from Camp Ramadi for short durations, to include MEF units, Task Force 145, and other special operations units operating in the Ramadi area.

While in Iraq, the 2–28 BCT was able to sustain an operational readiness rate of 95 percent. This only could be achieved by a dedicated and technically proficient maintenance team at both the organizational and DS levels, effective maintenance management at all levels, and the enablers provided by the combat service support automation management office (CSSAMO) and a supporting class IX management structure. This team was built and trained at Mobilization Center Shelby and improved continuously throughout the deployment in Iraq.

Recovery Operations

Recovery operations in Ramadi were combat operations. Operators were routinely engaged by small-arms fire while on site attempting recovery of CF, ISF, and civilian vehicles along BCT MSRs. Insurgents deliberately targeted recovery personnel responding to vehicle IED attacks.

The 779th GS Maintenance Company built and employed a recovery QRF that was on call 24 hours a day, 7 days a week at Camp Ramadi. The QRF was tasked by the BCT S–3 and was required to respond to any mission within 15 minutes. The team consisted of an M88 recovery vehicle, which was fabricated with ballistic glass to protect the operators and .50-caliber machinegun gunner, and up-armored heavy expanded-mobility tactical truck wreckers. The QRF would tailor the equipment package based on the mission assigned by the BCT S–3.

Typically, the maneuver unit requesting the recovery support would link up with the QRF at the FOB gate and provide security en route and at the recovery site. This allowed the QRF to focus on recovery operations instead of force protection. Most vehicles needing recovery were victims of IEDs, engulfed in flames when the QRF arrived and immobile. The QRF would use up to 15 portable fire extinguishers to extinguish the flames in order to make an initial approach to the vehicle. Sometimes the QRF would have to wait until the onboard ammunition "cooked off" before it could approach the vehicle.

The QRF became highly trained at hasty recovery operations and, in most cases, was able to limit onsite recovery time to 10 minutes. The QRF in Ramadi successfully executed numerous recovery missions without suffering any personnel casualties. Battalion

task force recovery personnel also executed many similar recovery missions in their respective battlespaces. During the deployment, the BCT lost a total of 94 vehicles, including 8 M1A1 Abrams tanks, 19 M2A2 Bradley fighting vehicles, and 45 M1114 and M1151 up-armored high mobility multipurpose wheeled vehicles (HMMWVs), to IEDs. Each of these vehicles had to be recovered to the FOB by skilled recovery personnel and then evacuated again from the FOB to the FSB cannibalization point before being retrograded to a theater Defense reutilization and marketing office.

Although it is very difficult in peacetime to replicate combat recovery operations, ARNG unit commanders should place a high priority on getting assigned Soldiers qualified with additional skill identifier H8, wheeled vehicle recovery, and conducting realistic premobilization recovery training using code H (unserviceable) wheeled and combat vehicles.

Class IX Management

The FSB made very effective use of LNOs by placing several class IX expeditors at Logistics Support Area (LSA) Anaconda and Camp Arifjan, Kuwait. The maintenance officer in the FSB SPO routinely sent emergency high-priority parts requests to these expeditors, who would conduct walk-through requisitions at the many tactical, multiclass SSAs at LSA Anaconda and Camp Arifjan. The critical parts were then placed on "Iraqi Express" ground convoys from Kuwait to the BCT SSA in Iraq or on CLPs, helicopters, or Sherpa airplanes from LSA Anaconda. LNO expeditors were also used to track and expedite

A Soldier guides loading of ammunition at the brigade support area during the 2005 October referendum.

the BCT's reparable items that were evacuated for repair to the many forward repair facilities at LSA Anaconda.

During the deployment, the BCT evacuated and returned several hundred items to LSA Anaconda to higher echelon maintenance facilities. The BCT maintenance effort could not have functioned effectively without the expeditors posted at the main supply and repair hubs in theater. The right LNO in the right location can be a tremendous asset for any unit.

Without a doubt, the greatest logistics challenge to the BCT in Iraq was providing logistics support to the ISF, which included both the Iraqi Army and Iraqi Police.

The MEF MLG supply maintenance unit (SMU) was used extensively in support of the BCT. This MEF GS supply activity for Iraq was located at the same FOB as the FSB and maintained 20,000 lines of multiclass supplies. This source of supply was a tremendous help in supporting the BCT. The FSB routinely conducted emergency walk-through requisitions at the SMU for urgently needed items not readily available in the BCT's SSA. A few examples of the items requisitioned were common item high-priority repair parts, Soldier personal protective equipment items that were zero balance at the central issue facility at LSA Anaconda, and bagged Portland cement used by the 876th Engineer Battalion for use in filling IED craters on BCT MSRs.

Although the SMU and the FSB were located at the same FOB, their respective service-provided management information systems did not communicate with each other. Consequently, manual, labor-intensive, walk-through requisitions had to be used to receive needed items. Since joint warfighting is upon us, the Department of Defense should field a joint logistics automation network so that all services can requisition supplies from a single, unified system.

The theater class IX referral process was problematic throughout the deployment. For example, if a unit had a valid class IX requisition and the part was sitting at another tactical SSA in Iraq, the part would still have to be shipped from the continental United States (CONUS) because the theater distribution system in Iraq was not in place to push the part to the requesting SSA. In order to get a part from another tactical SSA in Iraq, the maintenance officer would have to find the part through the corps/theater ADP (automatic data

processing) service center and then personally contact the SSA chief who stocked the part and request that the SSA ship the part to him on a gentlemen's agreement. If the SSA was not willing to ship the part, the requesting unit was out of luck or had to build a convoy to go and get the part themselves.

The BCT also experienced high requisition wait time (RWT) for parts that arrived via CLP from the joint distribution yard in LSA Anaconda. Because of the dangerous nature and unpredictability of the MSR's throughout Iraq, it would take up to 3 weeks to receive high-priority parts from LSA Anaconda, which meant a unit could receive a part faster from a depot in CONUS than from a depot in Iraq. The BCT SPO coordinated with the 3d Corps Support Command (COSCOM) staff and the 27th Movement Control Battalion and was able to establish a daily C–130 channel flight from LSA Anaconda to Al Taqqadum Air Base, which decreased the RWT from weeks to several days.

SSA Operations

The 228th FSB SSA was the largest tactical BCT SSA in Iraq. It consisted of 5,500 lines stored in parts trailers and on 463L pallets and had a footprint of over 4 acres. In addition to supporting dedicated customers, automatic referrals from other SSAs were established by the 3d COSCOM, which indirectly caused a net increase in customers. Most notable was a MEF armored task force that operated in western Al Anbar Province, which was a direct customer of a sister SSA at Al Taqqadum Air Base operated by the 44th CSB. At times, this had a draining effect on the brigade by taking high-priority class IX, like Abrams tank and Bradley fighting vehicle engines and transmissions, and leaving the BCT's organic units and SSA without any class IX. When asked, the SSA would also reciprocate with the Marine SMU on Al Taqqadum Air Base and provide MEF units with critical common item class IX repair parts if they were available in stock.

Customer wait time (CWT) and RWT in Iraq are critical to the success of any unit's maintenance posture. Shortly after the BCT arrived in Iraq, it became apparent that a shortage of personnel within the SSA was negatively affecting the CWT and the RWT for all of the SSA's dedicated customers. This had a direct and immediate negative effect on the materiel readiness of the BCT. The amount of parts and supplies that BCT units were ordering far exceeded the processing capability of the SSA on a daily basis because of the shortage of SSA personnel. During the deployment, the SSA averaged 950 receipts and 650 materiel release orders daily.

During the periods preceding the October referendum, December elections, and the Ramadi saturation operation in the spring of 2006, the SSA experienced

An Iraqi Army convoy awaits departure from Al Taqqadum Air Base to eastern Ramadi. The forward support battalion personal security detachment routinely provided escort and force protection for convoys operating on main supply routes.

tremendous peaks of up to 1,500 receipts daily. In order to lower the number of days it took a part to reach the customer and meet the Department of the Army theater goal of 20 days, additional FSB personnel were required to handle the high volume of parts and supplies in both the receiving and storage sections of the SSA. Competing priorities within the BCT and troop-to-task issues within the FSB caused the SSA's strength to vary from a low of 25 personnel to a high of 50. Eventually, the BCT headquarters assisted in arranging for additional BCT personnel to be assigned to the SSA to meet this increased demand. SSA-assigned personnel were "fenced" and exempt from internal FSB taskings. The increase in SSA personnel resulted in a reduction of RWT to 12 days.

ISF Support

Without a doubt, the greatest logistics challenge to the BCT in Iraq was providing logistics support to the ISF, which included both the Iraqi Army and Iraqi Police. By the time the BCT redeployed, over a division's worth of ISF units were operating throughout the BCT's AO. ISF units had virtually no internal logistics capability. Logistics support to ISF was supposed to be provided by Ministry of the Interior or Ministry of Defense contracts. The only exceptions were class IIIB of both mogas (motor gasoline) and JP8 and class V (ammunition), which were provided entirely by the FSB.

In some cases, the dangerous nature of the Ramadi area caused contractors to fail to perform to standard, go missing, or be killed by insurgents. As a result, the BCT was forced to provide "back-stop" logistics support to the ISF to ensure mission success.

Rapidly emerging and unforecasted logistics requirements became standard operations for the FSB. This had the effect of desynchronizing normal logistics support to BCT units and draining precious logistics

assets and capabilities. For example, during the month of April 2006, the eastern Ramadi Ministry of Defense contractor provided only 4 truckloads of food to sustain 1,200 Iraqi Army troops. The remaining food convoys either never arrived or arrived with food that was completely rotten and had to be thrown out. On one occasion, an Iraqi contractor arrived at the brigade support area on Al Taqqadum Air Base and needed an escort to an Iraqi Army camp in eastern Ramadi. The contractor did not want to be observed by the insurgents as collaborating with CF or Iraqi Army units. Therefore, the FSB had to hide him and his vehicle and equipment in the back of a container and transport them to the Iraqi Army camp so that he could perform his contracted services. Building internal logistics capability for the Iraqi Army should occur in the near future, and it should become a command priority.

The deployment of the 2–28 BCT in Operation Iraqi Freedom 05–07 was a great demonstration of joint logistics warfighting. The logistics success of the BCT was a direct result of the courage, dedication, and professionalism of the thousands of Army, Marine Corps, Navy, and Air Force logisticians who worked together to ensure mission success in an often confusing and violent area of operations. Soldiers, Marines, Seamen, and Airmen overcame interservice cultural and doctrinal differences to achieve a unity of logistics effort that effectively sustained CF and ISF units within the Ramadi area. **ALOG**

Major Mark D. Pike, PAARNG, is the surface maintenance manager for the Pennsylvania Army National Guard. While deployed in support of Operation Iraqi Freedom 05–07, he served as the support operations officer for the 228th Forward Support Battalion. He has a bachelor's degree from Indiana University of Pennsylvania.

Automating Property Accountability

by Colonel Kenneth A. Scott, USAR, and Major Charles W. Weko, USAR

The current procedures for determining liability for property loss and damage have proven to be insufficient. Applying modern technology to the process will help the Army more effectively deter property loss.

From 2005 to 2006, the Army experienced a 17-percent increase in lost, damaged, or destroyed (LDD) equipment. In 2007, this trend continued with an alarming 36-percent increase in LDD equipment. In fact, since the introduction of the Financial Liability Investigation of Property Loss (FLIPL) process, the Army has almost doubled the rate at which accountability is being lost.

And why should it not double? The word is out: Soldiers and leaders have finally learned that the FLIPL process is virtually useless as a deterrent to property loss. With chapter 13 of Army Regulation (AR) 735–5, Policies and Procedures for Property Accountability, packed with 63 pages of dense legalese, just learning how to process a FLIPL is a daunting task—never mind trying to master the process in a combat zone.

Soldiers have learned that they have two choices when a piece of equipment comes up missing. They can sign a statement of charges (SOC) and pay a depreciated value of the missing equipment, or they can deny responsibility and stick some staff officer with the task of trying to prove their liability by processing a FLIPL. What does the Soldier pay if he is found financially liable for the missing equipment? He pays exactly the same amount as he would have paid under the SOC. For the Soldier, the smart choice is clear: Go with the FLIPL every time.

The FLIPL process is strictly manual. The Army offers S–4s no tools for making FLIPL management easier. AR 735–5 states nine times that all entries must be made on the original Department of Defense (DD) Form 200, Financial Liability Investigation of Property Loss. So, S–4 shops keep typewriters handy and clerks busy with administrative tedium.

To make the FLIPL an effective deterrent to property loss, the Army must improve the way the process leverages technology. By creating a web-based FLIPL processing tool, technology can be used to connect participants, automate repetitive processes, and standardize the execution of FLIPLs. These applications should work together in one tool that interfaces with Property Book Unit Supply Enhanced (PBUSE) and the Defense Finance and Accounting Service (DFAS). The tool could be either a sub-module of PBUSE or a stand-alone system. By tying into PBUSE, the property book officer would be able to assign a document number and track the status of the FLIPL without having to develop his own database. By connecting with DFAS, the command would be able to ensure that service members found to be financially liable are held financially liable before the FLIPL is forgotten by the command.
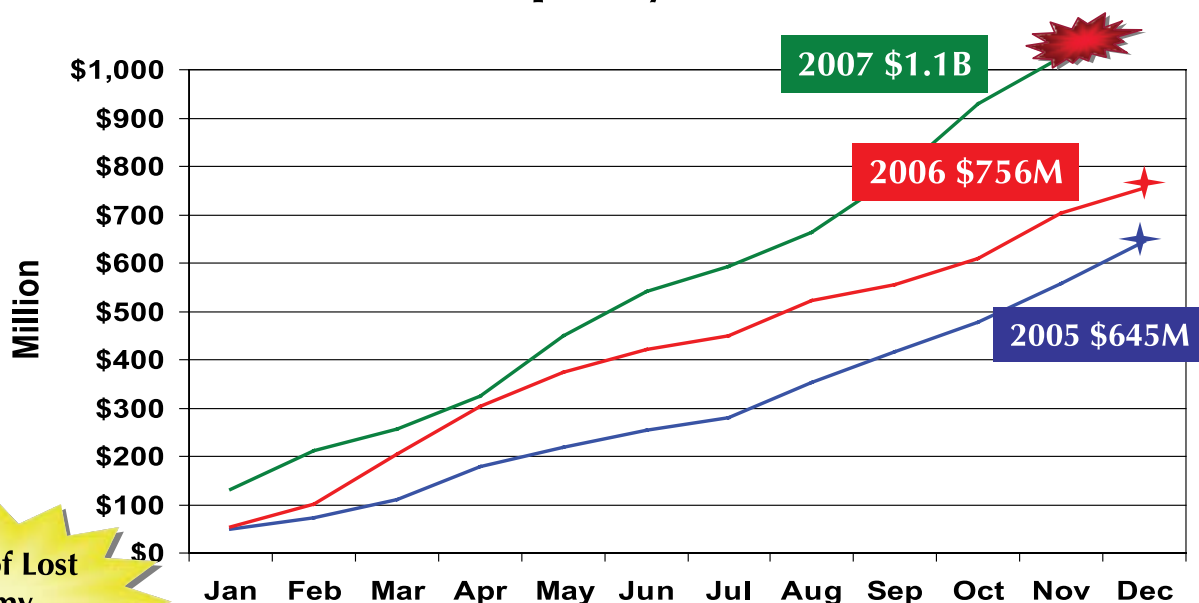
Connecting Participants

One of the biggest challenges of processing FLIPLs is the large number of people involved in reaching a decision. A FLIPL for which financial liability is determined will be touched by at least 11 individuals, including the initiator, the respondent, the responsible officer, the property book officer, the appointing authority, the approving authority, the investigating officer, the legal reviewing officer, the respondent's attorney, the unit personnel administrator, and a finance officer. In reality, the number of people involved in the FLIPL can be even higher depending on the complexity of the investigation. Since all of these people need to communicate with each other about a common document, communication can become complicated and bogged down. Experience shows that communication gaps seem to be the main reason for delays in FLIPL processing.

To resolve this difficulty, an automated FLIPL process should make use of participants' Army Knowledge Online (AKO) email addresses to automatically communicate with one another. For example, once the investigating officer has completed his findings, all he would need to do is click a submit button to have his results automatically forwarded by email to the appointing authority. This process could also make use of digital signatures to avoid the need to have each participant physically sign the FLIPL.

Using AKO to communicate with participants would eliminate the need to send Soldiers certified return receipt mail. The minimum cost for a 1-ounce first class certified letter with a return receipt is $5.21. Since a Soldier who is held financially liable is notified at least twice (once by the investigating officer and once by the approving authority), every finding of financial liability costs the Army $10.42 in postage.

Loss of Army Property While Using the FLIPL Process as a Property Loss Deterrent

Cost of Lost Army Equipment

Chart — Y-axis "Million" from $0 to $1,000 (in $100 increments); X-axis months Jan–Dec. Three lines labeled: **2007 $1.1B**, **2006 $756M**, **2005 $645M**.

	2005	2006	2007
Average dollar value lost per month	$53.8M	$63M	$86.7M
Average number of weapons lost per month	107	117	149
Average number of command critical items lost per month	246	317	383
Average number of items lost per month	84 K	109 K	66 K

This chart reflects the results of using financial liability investigations to "fix" hand receipts rather than enforcing the proper use of paperwork and inventories. Each year, more and more Army equipment is written off because of inadequacies in the FLIPL process.

Eliminating the need to use "snail mail" would speed up communication and reduce costs.

A final application of technology to improve communication in the FLIPL process should be to provide management tools to enable effective oversight of the FLIPL process. While this would most likely take the form of an automated Department of the Army Form 1659, Financial Liability Investigation of Property Loss Register, other reports could be provided to categorize the FLIPLs by age, status, or dollar value.

Automating Repetitive Processes

In the course of finding a respondent financially liable, a minimum of six memorandums are created and distributed. These documents include continuation sheets, the appointment of the investigating officer, a notification of the recommendation of financial liability, a notification of finding of financial liability, and others. It would be easy for a web-based FLIPL processing system to automatically create these documents based on data provided by the participants. For example, once the appointing authority selects an investigating officer, the information he provides about the investigating officer could be used to generate the appointment memorandum for the investigating officer. This automatic document creation function could even go beyond memorandums to include creating mailing labels for certified mailings.

Another area that could easily be automated involves the cost calculations that the initiator and investigating officer are responsible for performing. Not only could the unit price of lost equipment be automatically entered into block 7 (eliminating the risk of math errors), but depreciation calculations could also be performed for the investigating officer. A calculator for determining split liability would be very useful when more than one person is held financially liable.

Finally, exhibit management could be improved by enabling participants in the FLIPL process to upload portable document files (better known as PDF) to the online FLIPL. This would ensure that all participants in the process see the same information and that the information is not lost as a result of poor recordkeeping. This could be taken one step further to assign standard exhibit letters to mandatory FLIPL documents. For example, the appointment of investigating officer memorandum could always have the same exhibit number for all FLIPLs.

Standardizing Execution

Since the participants in FLIPLs often change, recommendations tend to vary dramatically depending on the philosophy of the participants. Some initiators provide very little information, while others provide a great deal. Different investigating officers employ different techniques and assign different values to certain pieces of information. And, of course, judge advocate general (JAG) officers commonly disagree on how to interpret AR 735–5. (Once, 35 FLIPLs were given to a board of 6 JAG officers for legal review. For every single file, at least one lawyer said it was legally sufficient and at least one said it was not.) To resolve these issues, a web-based FLIPL process could take steps to standardize the execution of the FLIPL.

For starters, initiators should be provided with a series of standard questions to help them complete block 9 of the DD Form 200. These questions should include the following: (1) When was the equipment last inventoried? (2) Who had direct responsibility for the property? and (3) What actions were taken by the command to ensure that the property would not be misplaced? By guiding the initiator to thoroughly communicate the circumstances surrounding the equipment loss, the need for investigating officers can be reduced. This would in turn reduce the time and cost involved in the process.

The investigating officer's performance could also be improved by providing standardized guidance. This could take the form of an online training session that would lead the investigating officer through a presentation of what his duties and responsibilities are and how best to accomplish them. This initial training session should be followed by a review exam to certify that the investigating officer adequately understands his role. The quality of the investigating officer's recommendation could also be improved by requiring him to substantiate each element of financial liability (loss, responsibility, proximate cause, and culpability) with a brief explanation of how he arrived at his findings and what exhibits he used to verify those findings.

Finally, a web-based FLIPL processing system would enable the Army to centralize legal reviews of FLIPLs. Instead of having an assortment of JAG officers performing legal reviews of a few FLIPLs each year, a small staff could review all FLIPLs. Not only would this provide consistency in the reviews, it also would encourage consistent performance by the investigating officers. An additional benefit of using a web-based FLIPL processing system would be that legal officers could easily reinvestigate selected FLIPLs that resulted in findings of no financial liability.

The current manual FLIPL process fails to take advantage of modern technology. It consumes an unnecessary amount of manpower and time and results in FLIPLs that have inconsistent findings. These shortcomings encourage Soldiers to use FLIPLs as a quick way to rid themselves of accountability for missing equipment. When units ineffectively process manual FLIPLs, Soldiers become less diligent in securing Government property. Improving the ease and effectiveness of processing FLIPLs will truly create an environment that encourages responsible property stewardship. **ALOG**

COLONEL KENNETH A. SCOTT, USAR, IS THE DEPUTY BRIGADE COMMANDER OF THE 304TH CIVIL AFFAIRS BRIGADE IN PHILADELPHIA, PENNSYLVANIA. HE SERVED AS A BRIGADE G–4 DURING OPERATION IRAQI FREEDOM IN 2003. HE IS A GRADUATE OF THE ORDNANCE OFFICER BASIC AND ADVANCED COURSES, THE COMBINED ARMS AND SERVICES STAFF SCHOOL, AND THE ARMY COMMAND AND GENERAL STAFF COLLEGE, AND HE IS CURRENTLY ENROLLED IN THE ASSOCIATE LOGISTICS EXECUTIVE DEVELOPMENT COURSE.

MAJOR CHARLES W. WEKO, USAR, MOST RECENTLY SERVED AS THE ASSISTANT S–4 OF THE 304TH CIVIL AFFAIRS BRIGADE. HE HAS ALSO HELD MULTIPLE ASSIGNMENTS AS A PROPERTY BOOK OFFICER AT THE FORT DIX CENTRAL ISSUE FACILITY, THE 172D INFANTRY BRIGADE (SEPARATE), AND THE 46TH FORWARD SUPPORT BATTALION'S CLASSES II, IV, AND VI WAREHOUSE. HE IS CURRENTLY ATTENDING THE NAVAL POSTGRADUATE SCHOOL, WHERE HE IS WORKING ON AN M.S. DEGREE IN OPERATIONAL RESEARCH.

Is It Time to Reconsider Training for PBUSE?

BY CHIEF WARRANT OFFICER (W–4) JOEL LOCKHART

Now that Property Book Unit Supply Enhanced is in general use, it is time to look at the training provided to its operators and determine how that training can be improved.

After returning from Afghanistan in 2005, I gave my daughter—then 12 years old—her first iPod. Frankly, I was concerned that she was too young to figure out how to work it. Initially, she was a little uncertain about how to use it or the accompanying software, iTunes. But she slowly started to explore both the iPod and iTunes, and, surprisingly, within a few hours, she was confidently rocking out and downloading music! How did she do it? It was simple. She just kept clicking and guessing until she figured it out.

I share that story because I see similarities between my daughter's first encounters with an iPod and our Soldiers' first encounters with Property Book Unit Supply Enhanced (PBUSE). Like my daughter, they seem to "click and guess" until they figure it out. Unfortunately, they are not always getting it right.

What Is PBUSE?

PBUSE is the Army's web-based, state-of-the-art, force sustainment property accountability system. It provides Standard Property Book System-Redesign (SPBS–R) and Unit Level Logistics System-S4 (ULLS–S4) functionality. PBUSE is designed to provide the Army with a Federal Financial Management Improvement Act- and Chief Financial Officer Act-compliant, integrated automated property accountability information system for both garrison and tactical units. PBUSE is part of the Global Combat Support System-Army (Field/Tactical) (GCSS-Army [F/T]), a web-based, fully interactive, menu-driven, automated combat support system. PBUSE officially replaces SPBS–R and ULLS–S4.

Who Uses PBUSE?

PBUSE is used at the property book and unit supply levels for installations, centers, agencies, schools, training centers, support commands, divisions, brigade combat teams, combat aviation brigades, armored cavalry regiments, nondivisional units, battalions, companies, Army Reserve Officer Training Corps units, and

Training for PBUSE is available through several methods. However, most of these are provided primarily to military occupational specialty 92Y or 920A and do not reach all potential users.

PBUSE Training Opportunities				
Name	**Training Venue**	**Provider**	**User Eligibility**	**Target**
Job Aids	On-line tutorial	Northrop Grumman	Army Knowledge Online (AKO) User	MOS 92Y 920A
PBUSE Distributed Training Vehicle	On-line tutorial	Army Combined Arms Support Command, Fort Lee, Virginia	AKO User	MOS 92Y 920A
Residential Training	Classroom	Army Quartermaster School, Fort Lee	Course AIT (92Y) BNCOC/ANCOC (92Y) Quartermaster WOBC/WOAC (920A) PB–E Functional Course (see ATRRS)*	MOS 92Y10, 92Y20–30 920A *Personnel working at PBO (92Y, 920A, and civilians)
New Equipment Training	On the job	PM–LIS,Fort Lee	Provided when equipment is fielded	MOS 92Y

Legend
AIT = Advanced individual training
ANCOC = Advanced Noncommissioned Officer Course
ATRRS = Army Training Requirements and Resources System
BNCOC = Basic Noncommissioned Officer Course
MOS = Military Occupational Specialty

PB–E = Property Book-Enhanced
PBO = Property book office
PBUSE = Property Book Unit Supply Enhanced
PM–LIS = Program Manager-Logistics Information Systems
WOAC = Warrant Officer Advanced Course
WOBC = Warrant Officer Basic Course

Army National Guard and Army Reserve units. Staff sections at these respective levels (S–4, G–4, and J–4) also use PBUSE for asset management.

Logging into PBUSE requires an Army Knowledge Online user name and password and approval from the information system security officer. PBUSE employs user roles to control access to the various processes and functions in the system and determines the privileges granted within a process—read or write. Users are assigned user roles based on their work locations, such as property book office or unit level, and their positions, such as commander, property book officer, team chief, supply clerk, and so on. When access is denied to a process or function, the process title or function button is rendered inactive, or "grayed out," by the system.

What Training Is Available?

Training for PBUSE is fast becoming a challenge for all. For Active component Soldiers, residential PBUSE training is embedded in the program of instruction for the unit supply specialist (military occupational specialty [MOS] 92Y) at the Army Quartermaster Center and School at Fort Lee, Virginia. Noncommissioned officers and warrant officers also receive PBUSE training at the Quartermaster School.

The Quartermaster School also provides functional training on PBUSE. On request, the Quartermaster School has deployed mobile training teams to provide onsite PBUSE training.

Several years ago, the Army Combined Arms Support Command (CASCOM) developed a distributed-learning PBUSE training vehicle, but few operators seem aware of it. More recently, Northrop Grumman developed an online tutorial for PBUSE called "Job Aids." Even fewer Soldiers seem to know about that.

All of these training media target supply personnel holding MOS 92Y. However, many users of PBUSE are not 92Ys, nor should they be. Some examples of non-92Y PBUSE users are unit commanders and S–4 officers.

How Could Training Be Improved?

Is it time to reconsider who, where, and how we train PBUSE? I believe the answer is clearly "yes." I suggest redesigning and merging CASCOM's distributed PBUSE training, Northrop Grumman's Job Aids, and the Quartermaster School's functional training to create an online training program and process that is specifically tied to PBUSE user roles and assigning PBUSE access.

In other words, PBUSE users would not be granted access to PBUSE until successful completion of their specific PBUSE user-role training course. Each

PBUSE user would then recertify his user role annually or when a software change package affects his user role.

Why Change?

Army-wide training challenges and other notions that warrant reconsideration of PBUSE training include—

• Demands of the Army Force Generation model (ARFORGEN). ARFORGEN is a force management process that leverages modular unit designs and operational cycles to provide a sustained deployment capability of operationally ready units.

• Decreased time at home between deployments.

• Reduced travel for training. The Army Training and Doctrine Command's desire is to decrease training time away from a Soldier's home station.

• Untrained users. Numerous users of PBUSE are granted access without formal training of any type. This program would preclude that practice.

• Availability to varied MOSs. Training only 92Ys will not fully capture all potential users' PBUSE training needs.

• User competence. Training organized by user roles would train users before allowing access to the system and would increase user competence.

• Uniformity. Online, targeted user training would provide uniformly standard training to all.

• Affordability. Targeting training by user roles arguably would provide a low-cost but highly effective solution for PBUSE training deficiencies when compared to more expensive residential or mobile training team-provided training that targets only a percentage of the Army's PBUSE training need.

By reconsidering who, where, and how we train PBUSE, we can eliminate the need for our Soldiers to "click and guess" their way to a PBUSE training solution. In doing so, we provide our Soldiers more dwell time at home with their families between deployments while saving our Nation money that otherwise would be spent on traditional residential training—a potential win-win-win for all.

Chief Warrant Officer (W–4) Joel Lockhart is a senior instructor for the Warrant Officer Division, Logistics Training Department, Army Quartermaster Center and School, at Fort Lee, Virginia. He holds a B.S. degree from Excelsior College and is a graduate of the Warrant Officer Candidate School, Quartermaster Warrant Officer Basic and Advanced Courses, the Warrant Officer Staff Course, and the Warrant Officer Senior Staff Course.

Graduate-Level Education for Logisticians

BY CAPTAIN STACY PENNINGTON

The author uses her experience as a student to describe
the Master of Military Logistics program at North Dakota State University,
one of several universities offering a master's degree to Army logisticians.

The ability of the United States to fight and win wars rests on the military's ability to deploy and sustain troops in theater. Our logistics networks need to become even more flexible in order to respond to an increasingly unstable geopolitical environment. The only way to develop such networks is to create adaptable logisticians who have the knowledge and skills to integrate, coordinate, and synchronize capabilities to optimize the use of all available logistics assets and provide worthwhile outcomes in a joint environment. The best way to cultivate these expert logisticians is to provide professional education opportunities that allow students to build new skill sets and gain fresh perspectives on global logistics and that encourage them to develop contacts with other logisticians. The Master of Military Logistics (MML) program at North Dakota State University (NDSU) in Fargo, North Dakota, provides just such an experience.

An Interdisciplinary Approach

NDSU is uniquely situated to provide a high-quality MML program because it is home to the Upper Great Plains Transportation Institute (an independent organization that conducts research and outreach in urban and rural transportation and logistics issues) and a new technology park that holds research and development contracts with the Department of Defense. These two great resources provide students with access to research and analytical tools that no other college can offer.

The university also recognizes the importance of an interdisciplinary approach to teaching logistics. To develop a truly interdisciplinary approach, the program recruited instructors from NDSU's colleges of Agriculture, Food Systems, and Natural Resources; Arts, Humanities, and Social Sciences; Business Administration; Engineering and Architecture; and Science and Mathematics. The MML program is part of the Transportation and Logistics Program offered through the College of Graduate and Interdisciplinary Studies and is sponsored and coordinated by the Upper Great Plains Transportation Institute.

The program does not emphasize one right way of performing logistics operations. It focuses on providing the technical expertise to evaluate situations and to devise plans based upon the evaluation. The program's director, Dr. Denver Tolliver, put it best when he said, "We want to develop global, interdisciplinary problem solvers who can think out of the box and make confident logistical decisions with little information."

The instructors make a concerted effort to understand the needs of the military and to shape their courses around those needs. The courses support one another, providing their students with advanced skills and knowledge in designing and managing global supply chains. Students expand on military training and gain a deeper understanding of how to analyze transportation networks and manage inventory. They study civilian business models, become familiar with best practices from a variety of industries, and apply them to military models. This enhances critical thinking skills and helps each student to build a toolbox to use in future challenges.

Preparing for Challenging Careers

Students not only get a strong background in transportation and supply chain management, they also acquire skills that will aid them in all aspects of their logistics careers. Courses in change management and enterprise resource planning bring greater understanding to the total Army transformation process. Courses on crisis management and homeland security shed light on the cultural impact of logistics operations and focus on less traditional logistics missions. Students receive instruction in contract law and acquisition. Also studied in detail is the increasing role of technology in sensing wear on equipment, tracking supplies, and securing information networks. This interdisciplinary approach gives students the chance to interact with professionals

throughout the university and develop strong and knowledgeable networks. Captain Joshua Hirsch, a student, expressed his sentiments about the program, saying, "This program is going to make me a better logistical officer, so I can better support the troops on the ground with necessities in a timely manner. This will also make me a better planner and enables me to see the global picture."

An important requirement of the program is a country study, where students use their new awareness of logistics procedures to analyze the logistics distribution network of a strategically important foreign country. This exercise allows for students to put their newfound capabilities to good use. Students complete these exhaustive studies and present them as part of a capstone exercise at the conclusion of the program.

MML students represent the Quartermaster, Ordnance, Transportation, and Engineer branches and the Civilian Service Corps. Each student comes from a different background, and each has his own "war stories" to share with the class. Interacting with other logisticians is one of the best things about the program. Efforts are underway to include the other services to make the composition of the class more representative of the operational logistics environment.

The MML program synthesizes the most important themes in logistics and creates leaders who will be better able to support the Nation's strategic missions. The knowledge gained through the MML program is especially useful for those working at a strategic level, but it is also useful for leaders at the operational and tactical levels. After completing the program, students have a fresh outlook on logistics and an enhanced ability to conduct operations. They learn skills that will make them more effective leaders at any level.

Any Army officer or Department of Defense (DOD) civilian seeking to enhance his logistics career should strongly consider applying for the MML degree at North Dakota State University. This master's program, which is offered in collaboration with the Army Logistics Management College (ALMC) at Fort Lee, Virginia, supports the 12 curriculum objectives defined by the Army's National Logistics Curriculum initiative administered by ALMC. The MML degree is a non-disquisition degree requiring a minimum of 36 graduate credits and involves a 12-month residence.

Interested officers and DOD civilians with recognized baccalaureate degrees from accredited universities should submit their applications to their appropriate human resource command or comptroller agency. A DOD selection board will review the applications and choose the most highly qualified candidates for the program and forward those applications for admission to the NDSU Graduate School. Information on the program can be obtained at http://www.ugpti.org/mll or by contacting the author at stacy.pennington@us.army.mil. **ALOG**

CAPTAIN STACY PENNINGTON IS THE SUPPORT OPERATIONS TRANSPORTATION OFFICER FOR THE 101ST SUSTAINMENT BRIGADE, WHICH IS DEPLOYED TO IRAQ. SHE HOLDS A B.S. DEGREE IN BIOLOGY FROM CREIGHTON UNIVERSITY AND A MASTER OF MILITARY LOGISTICS DEGREE FROM NORTH DAKOTA STATE UNIVERSITY. SHE IS A GRADUATE OF THE TRANSPORTATION OFFICER BASIC COURSE AND THE COMBINED LOGISTICS CAPTAINS CAREER COURSE.

National Logistics Curriculum

The Army's National Logistics Curriculum (NLC) has established a network of prestigious universities that offer logistics-based master's degrees. The NLC program is managed by the Army Logistics Management College (ALMC) at Fort Lee, Virginia. To date, ALMC has formed a partnership with six universities to offer master's degrees in logistics. They are—

- Florida Institute of Technology
- North Dakota State University
- Pennsylvania State University
- University of Kansas
- University of Tennessee-Knoxville
- University of Texas at Dallas

Graduate credit hours from ALMC's Theater Logistics Studies Program (TLog)—formerly called the Logistics Executive Development Course (LEDC)—or the Army Command and General Staff College's Intermediate Level Education (ILE) Program may be granted at some of the NLC universities. Pennsylvania State University, the University of Tennessee-Knoxville, the University of Texas at Dallas, and Florida Institute of Technology-ALMC campus will give the student credit hours (varying from 9 to 12) for completion of TLog. The University of Kansas gives the students credit for the ILE Program at the Army Command and General Staff College. All of the programs take 12 months or less to complete.

For information about obtaining credit hours, NLC partners, application processes for officers and civilians, and funding methods, email ALMC at leeeNLC@conus.army.mil or visit the ALMC website at www.almc.army.mil and click on "NLC (Master's Degree Program)."

From Just In Case to Just In Time

by Major Eric T. Wallis

In Operations Desert Storm and Desert Shield, mountains of materiel were sent to the area of operations because no one knew precisely what was needed. Commanders anticipated the worst and ordered supplies accordingly. In his book, *Moving Mountains: Lessons in Leadership and Logistics in the Gulf War*, retired Lieutenant General William G. Pagonis wrote, "Running logistics for the [first] Gulf War has been compared to transporting the entire population of Alaska, along with their personal belongings, to the other side of the world, on short notice. It has been likened to relocating the city of Richmond, [Virginia]."[1]

Operation Desert Storm provided the impetus for change in the logistics system. This paper will examine the change that took place in the Army from the "just-in-case" logistics system to the current "just-in-time" logistics system based on the resource dependency theory. Applying the resource dependency theory explains the weakness of the just-in-time logistics system in Operation Iraqi Freedom and shows that not all critical resources were considered. The basic history of the transition from just-in-case to just-in-time and an overview of the resource dependency theory are important to understand before delving into the analysis.

Transitioning From Just In Case to Just In Time

The traditional approach to logistics—which was used during Operation Desert Storm and earlier—was just-in-case logistics. Using this approach, the Army kept vast quantities of supplies, such as spare parts, ammunition, vehicles, and medicine, on hand just in case they were needed. This system required large storage facilities and thousands of warehouse personnel to manage the stockpiles. Units were forced to carry large stocks of common replacement parts (such as tires) with them when they deployed.

The bulky items often caused units to slow down considerably as they tried to keep up with a rapidly evolving operation.

To make things worse, the just-in-case logistics system was often unreliable, inefficient, and expensive. The drawbacks of the just-in-case method were learned the hard way during Operation Desert Storm when the Department of Defense shipped tons of medical supplies to the Persian Gulf region. By the time the supplies got there, many of them were out of date and useless to the doctors in theater. Tons of supplies went to waste.[2]

To fix these problems, the Army turned to private industry to find the most efficient means of providing necessary logistics support. Industry's solution was to implement the just-in-time logistics model. In this model, supplies are ordered only when they are needed or shortly before they are needed. Suppliers then deliver the required supplies, usually within a day. The just-in-time approach saves the Department of Defense time and money (warehousing costs in particular) and reduces waste by ensuring that products do not sit on shelves so long that they become stale or obsolete.[3]

Resource Dependency Theory

The resource dependency theory is an open-systems theory, which means that the theory views organizations as complex entities that interact with their environments rather than operate independently from outside factors. The resource dependency theory maintains that organizations lacking essential resources will seek to establish relationships with other organizations—or become dependent on them—to obtain needed resources. Resources are controlled by the physical, political, and social environments and can be raw materials, labor, capital, equipment, knowledge, and commercial markets for goods and services.[4] An organization works
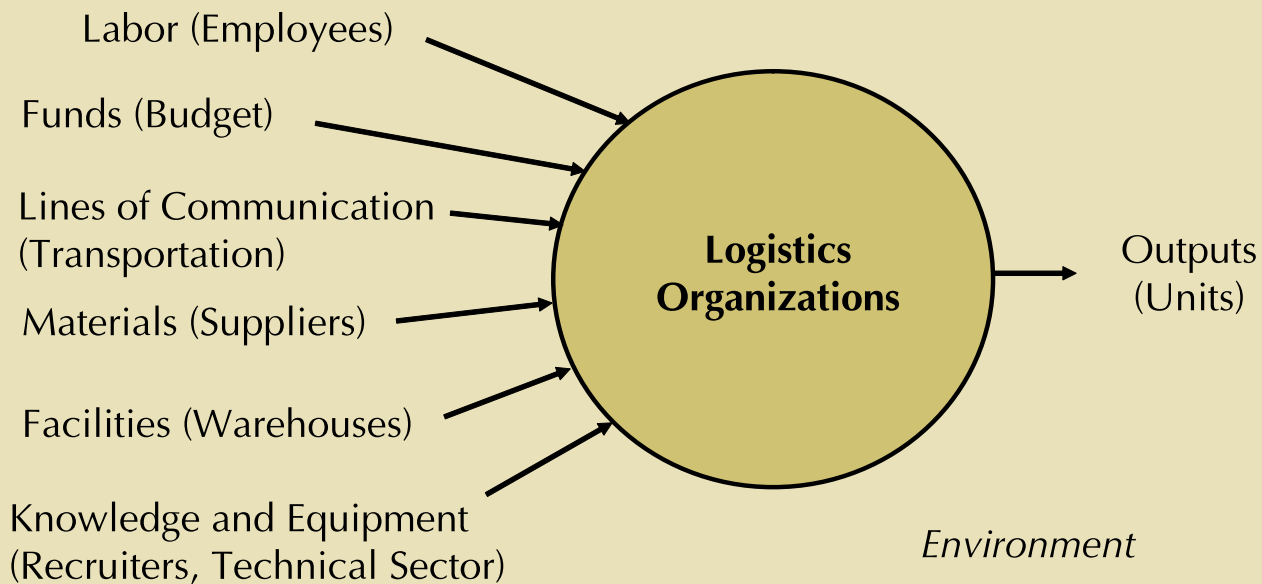
[1] William G. Pagonis, Lieutenant General, USA, and Jeffrey L. Cruikshank, *Moving Mountains: Lessons in Leadership and Logistics in the Gulf War* (New York: Harvard Business School Press, 1994), p. 1.

[2] Brian Friel. *Doctor's Orders*. Government Executive website, 2002. online at www.govexec.com/top200/02top/dmlss.htm; accessed 23 March 2007.

[3] Ibid.

[4] Mary Jo Hatch. *Organization Theory: Modern, Symbolic, and Postmodern Perspectives* (Oxford, UK: Oxford University Press, 1997), p. 78.

The Resource Dependency Theory

Labor (Employees)

Funds (Budget)

Lines of Communication
(Transportation)

Materials (Suppliers)

Facilities (Warehouses)

Knowledge and Equipment
(Recruiters, Technical Sector)

**Logistics
Organizations**

Outputs
(Units)

Environment

This chart identifies an organization's needed resources based on the resource dependency theory. Logistics organizations turn resources, which are dependent upon the environment, into outputs.

toward two related objectives: controlling resources to minimize its dependence on other organizations and controlling resources to maximize other organizations' dependence on those resources. Succeeding in either objective is thought to affect the exchange of resources between organizations, thereby affecting each organization's power.

A resource dependency analysis begins by identifying an organization's needed resources and then tracing them to their sources. This procedure can be visualized with a combination of the open-systems and interorganizational network models. The open-systems model identifies resource inputs and outputs. The network model defines where the resources and outputs are located.[5] The figure above represents the resource dependency analysis and can be applied to either the just-in-case theory or the just-in-time theory.

The final step in the process is to use the resource dependency perspective to evaluate the environmental actors that support or interfere with the organization's resource exchanges. To make this process practical, resources are sorted according to their

criticality and scarcity. Criticality is an estimate of the importance of a particular resource. Scarcity is an estimate of the availability of the resource within the environment.[6] After the resources are sorted, the organization seeks to manage (or avoid) its dependency on the resources or to make other environmental actors dependent on the organization.[7]

Evaluating Resources

The just-in-case logistics method would evaluate its resources like so—
• Funds: scarce and critical.
• Labor: critical.
• Facilities: critical.
• Materials: neither scarce nor critical.
• Lines of communication: neither scarce nor critical.
• Knowledge: neither scarce nor critical.
• Equipment: neither scarce nor critical.

Since funds are both scarce and critical, the organization would seek to reduce its dependency on this resource first. However, Army logistics would not benefit from reducing its dependence on the Department of Defense budget. As such, the organization

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[5] Ibid., p. 78.
[6] Ibid., p. 79.
[7] Ibid., p. 80.

> An organization works toward two related objectives: controlling resources to minimize its dependence on other organizations and controlling resources to maximize other organizations' dependence on those resources. Succeeding in either objective is thought to affect the exchange of resources between organizations, thereby affecting each organization's power.

would then move down the sorted list to resources that it can influence and on which it can be less dependent.

The labor and facilities resources are both critical. In the just-in-case logistics method, labor includes not only the personnel needed to maintain the large stockpiles in the warehouse but also the personnel required to purchase them. The facilities resource includes depots and warehouses that are necessary to house the stock piles. Because both of these resources are critical and expensive, the logistics organization would seek to reduce its dependency on them.

Because the just-in-time logistics method relies heavily on quickly providing supplies only as they are needed, there is no need (or the need is greatly reduced) for warehouses and depots and the personnel to work in them. Ordering supplies through an online ordering service also allows the organization to eliminate procurement personnel. In short, it is the perfect method to reduce the dependency of the logistics organization on the resources of labor and facilities.

Unfortunately, reducing dependence on labor and facilities results in an increased dependence on the resources of suppliers and lines of communication. In the just-in-time logistics method, the organization is completely dependent on the supplier's ability to provide the supplies that it needs and the transportation assets to get them delivered quickly. The organization is forced to assume that industry is holding a lot of inventory "just in case" it wants it "just in time" or that industry can surge to meet its needs. When the just-in-time model was implemented in a predictable environment, these dependencies and assumptions were acceptable. Just-in-time was efficient, reducing inventories and saving the Army a great deal of money.

However, problems arose when the just-in-time model was attempted in a deployed (unpredictable) setting. Suppliers often did not have enough material resources, such as repair parts and tires, to meet the operational need. When they did have the material resources, they often could not find adequate transportation or secure routes to get them into the combat zone and to the units fast enough. Logisticians started to get worried after the first couple of deliveries did not arrive in time. To ease their worry, they reverted back to what they knew. They started to increase their inventories of the things they knew they would need and basically returned to a just-in-case logistics method.

This article has briefly examined the movement of Army logistics from the just-in-case method to the just-in-time method. A critical analysis of both systems using the resource dependency theory has shown that both methods have dependencies that support or interfere with the organizations' resource exchanges (strengths and weaknesses). Which system is best? Clearly, logistics is a balancing act. The just-in-time method has problems in a combat zone. A stockpile created by the just-in-case system is just a best guess of what will be needed. The logistician must decide on the proper combination of both systems depending on the situation. If he does not find the right combination, the mission could fail. Perhaps this is why Alexander the Great said, "My logisticians are a humorless lot . . . they know if my campaign fails, they are the first ones I will slay."[8]   **ALOG**

Major Eric T. Wallis is the chief of clinical operations at Bassett Army Community Hospital at Fort Wainwright, Alaska. He has a master's degree in health information systems from the University of Pittsburgh, and he is a graduate of the Army Command and General Staff College at Fort Lee and the Combined Arms and Services Staff School.

[8] Alexander the Great. HighBeam Encyclopedia Logistics Quotes Site. (HighBeam Research, Inc., 2007) online at www.encyclopedia.com/doc/1G1-101940760.html; accessed 25 March 2007.

Weakening the Enemy From Within

by Noel D. Matchett

Editor's note: The author wrote this article as he imagines it would appear if it were a translation of a recently found and previously unknown chapter in The Art of War, *the influential treatise by the 6th century B.C. Chinese general Sun Tzu.*

Skillful generals will avoid lengthy campaigns because countries rarely benefit from extended war. Leaders unable to understand all the dangers and opportunities in deploying their armies will not correctly assess the long-term consequences of military action.

Therefore, wise leaders always seek means to identify who their enemies are and who they might be in the future.

When enemies have been identified, but before conflict has begun, wise leaders and knowledgeable generals should identify the key resources and elements that the enemy's army depends on.

For example, if the enemy depends on horses and chariots, then we should identify the supply sources of grain for feed; metal for horseshoes, nails, chariots, and armor; and the blacksmiths who service the enemy's forces. If the enemy depends on special means of communication, such as homing pigeons or very fast horses for couriers, they should be identified. If the enemy is concentrated in fortified cities, the mechanisms of controlling the gates, supplying food and water, and constructing fortifications should be determined.

After identifying these key items by agents and spies, every effort should be made to secretly weaken the enemy's defenses and ability to wage war.

For example, if you can subvert a blacksmith or substitute your agent, he can, unknown to the enemy, introduce defective material into the enemy's items of war. Poor quality metal will break under the stress of a campaign, weak wheels will cause the attack chariots to be disabled, and poorly made armor will fail to protect the troops. If you can supply stonemasons to build fortifications with unknown weak points and secret means of access or engineers to provide the enemy with defective designs, you can achieve long-term advantages. It is much better if this can be done without the enemy's knowledge. However, even if after time, the enemy realizes the problem but cannot identify which items are defective and which are sound, his willingness to do battle will be weakened. In addition, the feudal lords and 100 surnames will have spent their gold for inferior goods and will be slow to pay for additional expenses.

If, by offering products an enemy needs at a low price or of apparent excellent quality, the enemy buys items from one of our allies or—even better—from one of our own lords, this is a situation of golden opportunity. This may be created by appealing to the greed, arrogance, or ignorance of the enemy or by bribes or payments to leaders and lords and generals of the enemy, though the latter should be done if at all possible through intermediaries and agents.

A golden opportunity usually arises if actual conflict may occur far in the future. In this case, the enemy's leaders often are unsure and argue among themselves as to who their enemies are. After careful evaluation that these conditions are all favorable to our cause, all of our resources should be brought to bear to supply directly or indirectly the vital elements of the enemy's means of waging war. Exploiting a golden opportunity requires the greatest of diplomatic, military, and commercial skill but, if achieved, can create great weakness within the enemy forces, some known with time, some unknown until the stress of battle, and some never discovered. One means by which this can be achieved is by becoming the primary source of supply of a critical item that can suddenly be made unavailable to the enemy. Also, you can ensure that certain critical items have defects or are of poor quality so that they will fail in battle. Or, you can create an excuse for increasing the price five- or tenfold and use the profit to better equip your armies while weakening those of your enemy.

Wise generals should always remember that the ultimate objective is to conquer the enemy without waging war. Do this by weakening the enemy's resolve and resources and the will of his leaders, lords, and generals so that, although actual conflict is avoided, you accomplish your objective.

Therefore, a general who understands this and is successful in creating and exploiting golden opportunities will be able to defeat the enemy's armies without fighting and reach the highest state of military achievement. **ALOG**

Noel D. Matchett is the president and principal consultant of Information Security Incorporated. He was a member of the Senior Cryptographic Executive Service at the National Security Agency. He holds a B.A degree from Haverford College and an M.S. degree in mathematics from Rutgers University.

ALOG NEWS

ARMY BUDGET SUPPORTS
WAR AND TRANSFORMATION

The President's proposed budget for the Army, submitted to Congress in February, seeks to continue transformation efforts while supporting ongoing combat operations. The President is seeking $140.710 billion for the Army for fiscal year (FY) 2009, which is an increase of $11.801 billion, or 9.15 percent, over the $128.909 billion that Congress appropriated for FY 2008. The Army budget constitutes 27.3 percent of the $515.4 billion requested for the Department of Defense (DOD). The overall DOD budget represents a 7.5-percent increase over FY 2008 appropriations. (These figures do not include supplemental funding requests or appropriations for the Global War on Terrorism.)

The budget proposal is designed to sustain Soldiers, families, and civilians; prepare Soldiers for success in current operations; reset the Army to restore readiness and depth for future operations; transform the Army to meet the demands of the 21st century; and grow the Army and restore balance.

Spending requests by major category are—
- Military personnel: $47.041 billion in FY 2009 (an increase of 14.3 percent from the FY 2008 appropriation).
- Operation and maintenance: $39.761 billion in FY 2009 (up 10 percent from FY 2008 spending).
- Procurement: $24.552 billion in FY 2009 (up 8.4 percent).
- Research, development, test, and evaluation: $10.524 billion in FY 2009 (down 12.6 percent from FY 2008).
- Military construction: $5.437 billion in FY 2009 (up 17.6 percent).
- Family housing: $1.395 billion in FY 2009 (up 52.1 percent).

The procurement request will support the acquisition in FY 2009 of—
- 63 UH–60 Black Hawk utility helicopters for $1.063 billion.
- 16 CH–47F Chinook cargo helicopters for $443.5 million. Modifications costing $726.2 million will convert 23 CH–47Ds to the F model.
- 36 UH–72A Lakota light utility helicopters for $224.5 million.
- Seven joint cargo aircraft (JCA) for $264.2 million. The JCA will replace retiring C–23 and selected

C–12 transports. The JCA will be able to deliver routine sustainment items to forward supply bases and fly into and out of unimproved landing areas.
- 5,065 high-mobility multipurpose wheeled vehicles (HMMWVs) for $946.7 million.
- 3,171 family of medium tactical vehicles trucks and 2,743 trailers for $944.7 million.
- 345 palletized load system (PLS) trucks; 745 PLS trailers; 850 container roll-on-roll-off platforms; 320 container handling units; and 4,772 Movement Tracking Systems, for $923.3 million under the family of heavy tactical vehicles.
- 418 forward repair systems for $127.6 million.
- 36 M915A5 line-haul tractor trucks and 22 M916A3 light equipment transporter tractor trucks for $14.9 million.
- 45 rough-terrain container handlers for $45 million and 246 all terrain lifter, Army system, forklifts for $49 million.
- 85 large capacity field heaters (LCFHs) for $1.8 million. The LCFH is used to heat the new light-weight maintenance enclosure so Soldiers can repair equipment safely in cold conditions.
- 7 laundry advanced systems for $7 million. This is the Army's mobile field laundry system, and the new acquisitions will be issued to new quartermaster field service companies.
- 106 containerized kitchens for $25.5 million and 130 assault kitchens for $7.5 million. The containerized kitchen is replacing the mobile kitchen trailer, and the assault kitchen is replacing the kitchen, company level, field feeding enhanced.
- 43 mobile integrated remains collection systems for $17.8 million.
- 484 mobile maintenance equipment systems for 58 million. These systems, which include the shop equipment contact maintenance truck, shop equipment welding trailer, and standard automotive tool set, support on-site battlefield maintenance.
- 1 joint high-speed vessel for $168.8 million. This is the second of the five joint high-speed vessels the Army will acquire by FY 2012 to support logistics over-the-shore, in-theater port control, and riverine logistics operations.

The budget asks for $4.486 billion to execute 83 military construction projects designed to meet base realignment and closure requirements. Among these projects are construction of a Joint Center for Consolidated Transportation Management Training and a Joint Center of Excellence for Culinary Training at Fort Lee, Virginia, and construction of headquarters buildings for the Defense Contract Management Agency at Fort Lee, the Army Test and

Supporting homeland security operations is one of the missions performed by the UH–72A Lakota light utility helicopter.

Evaluation Command at Aberdeen Proving Ground, Maryland, and the Army Training and Doctrine Command at Fort Eustis, Virginia.

FM 3–0 MAKES STABILITY OPERATIONS A PART OF THE ARMY'S CORE MISSION

The latest version of Field Manual (FM) 3–0, Operations, was released in late February. The revised FM contains several changes to Army operations doctrine, the most important of which makes stability operations the third core Army mission, along with offensive and defensive operations. This step was taken because the Government recognizes that failed states are breeding grounds for terrorists and insurgents. The Department of State has been assigned responsibility to conduct stability operations with the assistance of the military.

When combat operations subside, the Army must help to create stable governments and economies. Adding stability operations as the Army's third core mission formalizes what it is doing now in Iraq and Afghanistan and what it has done in the past in

places like Bosnia/Herzegovina, Somalia, Haiti, and Kosovo. Stability operations include civil security, civil control, support to governance, provision of essential services, and support to infrastructure and economic development.

To accomplish the stability mission, the Army will provide security in the civilian community until a legitimate civil government is able to assume that responsibility. The Army will help governments rebuild their judicial and corrections systems, provide shelter for persons displaced by war activities, provide medical care and health services, and help the country develop public infrastructure, such as roads, railways, airports, and telecommun-ications systems.

Because of this change in the Army's core mission, a successful operation will be redefined as establishing a self-governing nation rather than just removing the enemy.

Other changes cover information operations, warfighting functions, the spectrum of conflict, defeat and stability mechanisms, and joint interdependence and modular forces. FM 3–0 stresses the importance and influence of information in the 21st century. The FM brings a philosophical shift to how Soldiers and commanders are empowered to complete their

missions and adapt to their surroundings. It asks leaders to embrace risk, focus on creating opportunities to achieve decisive results, and take initiative. It also institutionalizes the need for cultural awareness. These changes serve to provide an environment in which leaders are empowered to think about how best to achieve the wanted results and make decisions accordingly.

ARMY CONTRACTING COMMAND CREATED

The Army has announced a major restructuring of the Army Contracting Agency (ACA) in an effort to improve Army contracting management, particularly in expeditionary operations. The ACA, which currently is a field operating agency reporting to the Assistant Secretary of the Army for Acquisition, Logistics, and Technology, will be reorganized as the Army Contracting Command (ACC) and realigned as a major subordinate command of the Army Materiel Command (AMC)

The creation of the ACC will implement the recommendation of the Commission on Army Acquisition and Program Management in Expeditionary Operations—better known as the Gansler Commission, after its chairman, former Under Secretary of Defense for Acquisition, Technology, and Logistics Dr. Jacques S. Gansler—to "Restructure organization and restore responsibility to facilitate contracting and contract management in expeditionary and CONUS [continental United States] operations." The commission specifically recommended that "a single Army Contracting Command . . . be established and charged with developing a relevant and ready expeditionary contracting capability. The Commander of the Army Contracting Command would have directive authority over all Army contracting capabilities and provide a single focal point for status and readiness of the Army-wide contracting workforce."

The ACA currently supports installation-level contracting. The creation of the ACC will consolidate most of the Army's contracting resources in one Army command that will be able to provide a full-range of contracting services. The ACC will be commanded by a major general. It will have two subordinate commands, an expeditionary contracting command and an installation contracting command, each headed by a brigadier general. The ACC will include 171 modular contingency contracting teams, each with 2 officers and 2 noncommissioned officers, which will be able to deploy where needed. The expeditionary contracting command will also have 18 battalions of 8 to 9 people each and 7 brigades. Each brigade will have an Army Criminal Investigation Command agent and an auditor.

A mine-resistant, ambush-protected vehicle (MRAP) drives onto a commercial vessel at the Naval Weapons Station Charleston, South Carolina, in preparation for shipment to the U.S. Central Command (CENTCOM) area of operations. The U.S. Transportation Command (TRANSCOM) arranged for the sealift of more than 100 MRAPs in November. The 841st Transportation Battalion, Military Surface Deployment and Distribution Command, managed port operations for this shipment, which was part of the largest air and sea shipment of MRAPs at one time. Most MRAPS previously had been sent by air. TRANSCOM plans to increase the number of MRAPs shipped by sea while continuing to ship by air to meet CENTCOM's requirements.

The creation of the ACC is part of the Army Contracting Campaign Plan announced by the Secretary of the Army in February. The plan will guide the Army's ongoing efforts to identify and implement needed changes in contracting doctrine, training, leader development, materiel, and personnel.

URBAN OPERATIONS MUNITION APPROVED

The Army has approved the release of a new munition that will be safer and more effective for Soldiers to use in urban environments. The M1030 12-gauge shotgun breaching cartridge will reduce the danger posed by ricocheting fragments when Soldiers have to break down doors and disable locks.

According to R. Ned DeWitt, the product manager for crew served weapons at the Armament Research, Development, and Engineering Center at Picatinny Arsenal, New Jersey, "The M1030 is an antimaterial cartridge designed to be used for defeating wooden doors (deadbolts, knobs, and hinges) and padlock hasps. . . . Current shotgun-ballistic breaching utilized 00 Buckshot cartridges that are not designed for breaching. Soldiers have suffered severe injuries during breaching operations utilizing buckshot cartridges. The frangible [breakable] projectile of the M1030 minimizes ricochet hazards currently associated with buckshot breaching and provides a much safer alternative to the Soldier."

The requirement for a munition like the M1030 was identified by the Army in 1997. The M1030 uses commercial off-the-shelf technology and will be produced by Alliant Techsystems, Inc., at its Anoka, Minnesota, plant.

AMMUNITION PLANTS REALIGN

The Joint Munitions Command (JMC), a component of the Army Joint Munitions and Lethality Life Cycle Management Command, Army Materiel Command, is realigning the command structure of its installations effective 1 June. The new organization will align JMC installations according to mission rather than geographic location.

Under the plan, Radford Army Ammunition Plant (AAP) in Virginia and Holston AAP in Tennessee will report to Pine Bluff Arsenal in Arkansas. Both plants currently are managed by Blue Grass Army Depot in Kentucky.

Blue Grass Army Depot will assume responsibility for Scranton AAP in Pennsylvania and will continue to manage Anniston Defense Munitions Center in Alabama.

Milan AAP in Tennessee and Mississippi AAP, which is located at the Stennis Space Center in Mississippi, will report to Crane Army Ammunition Activity in Indiana. (The commander of Milan AAP also commands Mississippi AAP.) Milan and Mississippi AAPs are now subordinate to Blue Grass Army Depot.

Lake City AAP in Missouri will operate under McAlester AAP in Oklahoma. McAlester AAP will continue to manage Red River Army Depot and Lone Star AAP in Texas and Kansas AAP, which are scheduled to close under the 2005 Base Realignment and Closure Commission's decisions.

Riverbank AAP in California and Hawthorne Army Depot in Nevada will continue report to Tooele Army Depot, Utah.

GOVERNMENT-OWNED CONTAINERS PROVE TO BE COST EFFECTIVE

A Lean Six Sigma analysis resulted in a process for repairing Government-owned containers that is cheaper than leasing commercial containers. The process was used in a collaboration by the Joint Munitions Command (JMC), Army Intermodal and Distribution Platform Management Office, the Military Surface Deployment and Distribution Command (SDDC), and Department of the Army Office of the Deputy Chief of Staff, G–4, on a project that repaired and returned 110 Government-owned containers to service in lieu of using leased containers. McAlester Army Ammunition Plant, Oklahoma, and Tooele Army Depot, Utah, used the containers to move munitions into the U.S. Central Command theater of operations.

The process for repairing the Government-owned containers begins with the inspection of the containers at the depots to identify containers that are serviceable and containers that can be repaired. The first of each month, the Army Container Asset Management System compiles a list of reparable containers. JMC prioritizes the list by depot and sends it to SDDC, which manages Government-owned container repair funds. SDDC sends JMC a military interdepartmental purchase request for each container approved for repair, and JMC forwards the funds to the appropriate depot.

To date, SDDC has funded the repair of 234 Government-owned containers at JMC sites and approved funding for another 113.

EBOOKS AVAILABLE FOR SOLDIER EDUCATION

Soldiers and civilians now have access to more than 36,000 books on line. The Army Training and Doctrine Command (TRADOC) provides "ebrary," a digital library whose books cover subjects that include logistics, education, military science, cultural awareness, computer science, leadership, and training. These books are accessible from military office computers and TRADOC school library computers at site.ebrary.com/lib/tradoc. Access to this site is limited by Internet protocol address. If you are unable to access ebrary from your office or school computer, contact your TRADOC school library or call (757) 788–2155.

Home use of ebrary should be available through Army Knowledge Online (AKO) in the near future. AKO currently offers a smaller collection of ebook titles specific to adult training and education at www.us.army.mil/suite/page/245736. Links provide two other digital libraries.

ARMY CAREER TRACKER COMING

The Army is developing a web-based career management tool, called Army Career Tracker (ACT), that will be used to integrate training, assignment history, and formal and informal education for Army military and civilian personnel. ACT will enable Soldiers and civilians to manage their careers. It also will allow supervisors to mentor, counsel, and plan for the development of their subordinates.

ACT will be able to receive career-related information and recommendations from supervisors and to execute development-related activities from a single launch point. Users will be able to register for classes, track completion of career advancement requirements, and request assignments using ACT. The tool will also support the current initiative to award college credits for Army training, in conjunction with partners in higher education, by providing a cross walk of Army training to higher education credits.

The pilot program is being developed for enlisted Soldiers and is scheduled for release this spring. Officer and civilian versions will be added in the near future.

UPCOMING EVENTS

2008 NATO STANDARDIZATION CONFERENCE SLATED

The North Atlantic Treaty Organization (NATO) Standardization Conference will be held 15 to 18 September in the Washington, DC, metropolitan area. The United States is co-hosting the conference with the NATO Standardization Agency and the Allied Command Transformation (a NATO command). The conference brings together practitioners from North America and Europe to present developments in allied transformation and to facilitate the practical application of standardization in support of NATO.

The conference content will be best suited to Department of Defense military, civilian, and contractor personnel who are from NATO member countries and are required to have a fundamental knowledge of current and future NATO standardization activities and representatives from civilian standards developers who would like to gain more knowledge of standardization. Attendance is limited and may be subject to eligibility requirements.

Information on registration and hotel accommodations is available from the Defense Standardization Office at (703) 767–6872 or on line at www.dla.dsp.mil.

INTERNATIONAL DEFENSE LOGISTICS CONFERENCE PLANNED

The International Defence Logistics 2008 conference will be held 3 to 6 June in Brussels, Belgium. The conference will feature over 50 speakers, including senior officers from the North Atlantic Treaty Organization (NATO), the NATO Maintenance and Supply Agency, the European Defence Agency, the United Nations, and the Organization for Joint Armament Cooperation (OCCAR). The agenda will blend on-the-ground case studies from theaters of operations with enterprise-level explorations of organizational efficiency and transformation to provide an in-depth view of the logistics challenges facing the defense organizations of allied nations in the 21st century.

Interested parties can register online at www.defencelog.com, or call +44(0) 207 368 9465 or email enquire@wbr.co.uk.

Writing for *Army Logistician*

If you are interested in submitting an article to *Army Logistician*, here are a few suggestions that may be helpful. Before you begin writing, review a past issue of *Army Logistician*; it will be your best guide. Keep your writing simple and straightforward (try reading it back to yourself or to a colleague). Attribute all quotes. Identify all acronyms and technical terms. *Army Logistician's* readership is broad; do not assume that those reading your article are necessarily Soldiers or that they have background knowledge of your subject.

Do not worry too much about length; just tell your story, and we will work with you if length is a problem. However, if your article is more than 4,000 words, you can expect some cutting.

The word limit does not apply to *Spectrum* articles. *Spectrum* is a department of *Army Logistician* intended to present researched, referenced articles typical of a scholarly journal. *Spectrum* articles can be longer than standard feature articles and are published with footnotes.

Instructions for Submitting an Article

Do not submit your article in a layout format. A simple Word document is best. Do not embed photos, charts, or other graphics in your text. Any graphics you think will work well in illustrating your article should be submitted as separate files. Make sure that all graphics can be opened for editing by the *Army Logistician* staff.

Photos are a great asset for most articles, so we strongly encourage them. Photos may be in color or black and white. Photos submitted electronically must have a resolution of at least 300 dpi (.jpg or .tif). Make sure to include a description of what each photo depicts. Please try to minimize use of PowerPoint charts; they usually do not reproduce well, and we seldom have the space to make them as large as they should be.

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